

This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

## Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + Refrain from automated querying Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

### **About Google Book Search**

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at http://books.google.com/

N. It. Bouch

## HARVARD COLLEGE LIBRARY



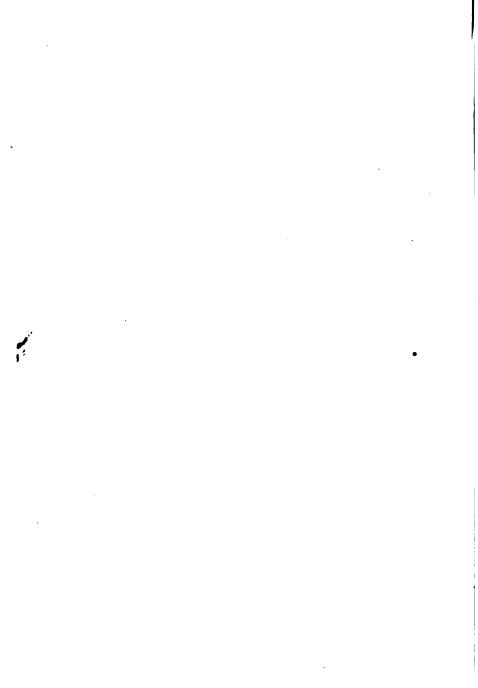
The Gift of

Mr. & Mrs. Henry Herrick Bond of Waltham, Massachusetts

\*

COMPLIVENTS OF A. P. SOU'LE, NEW ENGLAND AGENT.

3 2044 102 783 941







## ELEMENTARY

# PSYCHOLOGY

OR

## FIRST PRINCIPLES OF

## MENTAL AND MORAL SCIENCE

FOR

HIGH, NORMAL, AND OTHER SECONDARY SCHOOLS, AND FOR PRIVATE READING

BY

DANIEL PUTNAM, M.A.

PROFESSOR OF MENTAL AND MORAL SCIENCE, AND OF THE THEORY AND ART OF TEACHING IN THE MICHIGAN STATE NORMAL SCHOOL

WITH AN INTRODUCTION

BY

JOHN M. B. SILL, M.A. PRINCIPAL OF THE MICHIGAN STATE NORMAL SCHOOL



COPYRIGHT, 1889. BY

A. S. BARNES & COMPANY

NEW YORK AND CHICAGO

OFFICIAL PROPERTY OF

A. P. Soule, NEW ENGLAND AGENT. Educ 75358.89.716

# HARVARD COLLEGE LIBRARY GIFT OF MR. & MRS. HENRY H. BOND

AUGUST 31, 1933
BARNES' BRIEF HISTORY SERIES.

BARNES' BRIEF HISTORY OF THE UNITED STATES, FOR THE USE OF SCHOOLS. 12MO. ILLUSTRATED.

BARNES' BRIEF HISTORY OF FRANCE,
FOR THE USE OF SCHOOLS AND FOR PRIVATE READING.
12mo. ILLUSTRATED.

BARNES' BRIEF HISTORY OF ANCIENT PEOPLES,

FOR THE USE OF SCHOOLS AND FOR PRIVATE READING.

12MO. ILLUSTRATED.

BARNES' BRIEF HISTORY OF GREECE, With Select Readings from Standard Authors. 12mo. Beautifully Illustrated.

BARNES' BRIEF HISTORY OF ROME,
With Select Readings from Standard Authors.

12mo. Beautifully Illustrated.

BARNES' BRIEF HISTORY OF MEDIÆVAL AND MODERN PEOPLES,

FOR THE USE OF SCHOOLS AND FOR PRIVATE READING. 12MO. ILLUSTRATED.

BARNES' BRIEF GENERAL HISTORY.

The Ancient, Mediæval, and Modern Peoples.

BOUND IN ONE VOLUME. 12MO. ILLUSTRATED.

BARNES' POPULAR HISTORY OF THE UNITED STATES.

FOR PRIVATE READING AND FOR REFERENCE IN SCHOOLS AND FAMILIES, ROYAL 8VO. BEAUTIFULLY ILLUSTRATED,

## PREFACE.

"Know thyself" is a very ancient maxim. The affirmation that, "The proper study of mankind is man," is less ancient, more poetic, and equally worthy of acceptance.

To know one's self is to know man; to know man is to know mind, since mind alone constitutes the real man.

It is coming to be felt by students and teachers that the science of mind has claims upon their attention equal, at least, to those of the physical sciences, of history, or of language and literature. In this feeling the writer shares very fully.

One serious obstacle to the study of psychology in secondary schools has been the lack of text-books adapted to the degree of development and attainments of the pupils, to modern methods of investigation and instruction, and to the attainment of results which should be secured by such study.

This book owes its existence and its form to the long experience of the author as a teacher of the elements of mental and moral science in schools of different grades, but especially to an experience of many years in such teaching in the Michigan State Normal School.

It contains the substance of the instruction which has been found most profitable in such an institution. An attempt has been made to treat of the powers and activities of the mind in a manner easy and familiar, and adapted particularly to students of Normal Schools, High Schools, and other institutions of similar rank and character.

No claim to originality of thought is put forth. Materials have been gathered from all accessible sources. These sources are so numerous that special acknowledgments are impossible, excepting as they have been made in the body of the work.

No single master has been consciously followed. The right to differ from even recognized authorities has in all cases been reserved, and, in some cases, exercised.

The conviction is growing in the minds of all intelligent and thinking people that moral instruction and training,—instruction in right principles and training to right conduct,—are absolutely necessary in our public schools. The demand for such instruction and training is becoming imperative, and must be heeded if the school system is to retain its hold upon the people.

Effective moral instruction can be given only in connection with the study of the laws of mind. A basis for moral teaching and training must be found in the soul itself, and in those everlasting and unchanging principles of justice, beneficence, mercy, and forgiveness which commend themselves alike to men of all classes and creeds.

With their already crowded courses of studies, time can not be claimed in the schools for separate classes in both mental and moral science. Separate classes are unnecessary. Since both subjects are included in the more general science of psychology, they should be studied and taught together. The intention has been to embrace in this work the elementary essentials of both. Consequently the sensibilities have been treated more fully than they would otherwise have been, and a classification has been adopted suited to the end in view. The moral nature and the fundamental principles of right have been discussed at sufficient length to furnish the needed groundwork for moral instruction and training. Special attention has also been given to the nature, power, and importance of habit.

It is hoped that the work may prove to be adapted to fill the place of a text-book in mental and moral science in Normal Schools and in High Schools and other institutions of secondary instruction; and that it may also be of service to private readers, especially to teachers in the common and graded schools.

Note.—A blank leaf has been put in at the close of each chapter of the book for the convenience of teachers, students, and readers in making notes and in taking the names of books of reference, etc. It is believed that this will be found of considerable value.



CHAPTER P	AGI
Preface	iii
Introduction	V
I.—Methods of Study	1
II.—Study of the Body	7
III.—Sensation and Perception	17
IVIntuition. Intuitive Ideas and Truths	27
V.—Representative Activities	35
VIMemory. Laws of Association	45
VII.—THE ELABORATIVE OR THINKING ACTIVITIES	73
VIII.—ELABORATIVE OR THINKING ACTIVITIES—Continued.	
REASON AND REASONING	88
IX.—THE FEELINGS. GENERAL CHARACTERISTICS AND	
CLASSES	107
X.—Feelings—Continued. The Affections	127
XI.—FEELINGS—Continued, DESIRE	149
XII.—THE WILL	163
XIII.—THE MORAL NATURE	173
XIV.—Origin and Nature of Moral Law	187
XV.—Some Conditions of Effective Mental Work	30S
XVI.—Automatic, Impulsive, Reflex, and Instinctive	
Activities	227
XVII.—IMITATION AND HABIT	247
XVIIIMotives and Character	<b>26</b> 9
INDEX	279

\*\*\* \* \*\*\*\*

.

•

.

·

•

## INTRODUCTION.

THE claims of Psychology to a place as a subject of study in schools of secondary instruction are, at the present time, receiving more general and more favorable attention than has heretofore been accorded to them. With us, the High School, whose final year corresponds nearly to the twelfth year of advancement in the academic life of the average American youth, is the type of this class of schools. Until a recent date it has not been deemed practicable nor desirable to present this subject to students until their powers had been strengthened by a more widely extended course of disciplinary training. The traditions of a supposed sequence of studies, which has from time immemorial dominated the minds of those to whom it fell to construct courses of instruction, have insisted that this most useful and fruitful branch of study should have a place only in the most advanced grades of higher instruction as given in colleges and universities. and have forbidden it any recognition in High Schools. late years it is coming to be more clearly seen that there is a sequence not only as to subjects of study, but also a sequence, quite as worthy of attention, that has to do, not with the order of subjects, but with the phases of each particular subject. That is to say, that there is an order and sequence, not only in the different lines of study, but also another and more important sequence, that deals with the order in which the several aspects of each of these subjects shall be presented. tion of precedence between, for instance, arithmetic and grammar is found to be of less importance than the question of precedence between the objective and subjective phases of arithmetic and grammar. Mathematics, the science of quantity and magnitude, which in its advanced phases weighs the planets, and measures their inconceivable distances from us and from each other, reaches down to the very cradle and determines the

choice of the babe when it first manifests a desire for two desirable things rather than for one.

Now, there can be no question as to the pre-eminent value of Psychology as a subject of study. Studied in that vicious and sterile text-book fashion, which marks progress by pages and chapters and tests advancement by the power to reproduce definitions and to repeat ancient and musty illustrations, it is, like every thing else, so studied, of little value. Studied intelligently and by reasonable methods, in which the deliverances of consciousness are examined and classified, in which the relation of the three great activities of the soul are investigated and defined, and the laws which govern their interaction are brought to light and formulated, it becomes exceedingly fruitful and full of immediate and of prospective value. In its value as a disciplinary study, giving insight and power to determine the relations between things not revealed by sense-perception, it necessarily takes front rank. As a culture study it comes fully up to the excellent definition formulated by Dr. Payne in his essay on Education Values; for it results in the mental satisfaction coming from the conscious possession of knowledge. It may seem extravagant, as it certainly is contradictory to the popular judgment, to press its claims as a "practical study." But I have no hesitation in doing so. It is, in my judgment, eminently practical,—a branch of study invaluable for guidance in the affairs of life. It deals with springs of action hidden from those ignorant of the science of the soul. It supplies higher and nobler motives for right thinking, right feeling, and right doing. It reveals what lies back of the overt act, and places responsibility upon its only true logical ground. It gives to men the power of truthful discrimination in matters of motive and choice, and gives its due dignity to that which is spiritual and It lessens the danger of self-deception, that most pitiful condition of the soul, and teaches how to be just to ourselves and righteously charitable toward our fellows.

It is conceded that no teacher, ignorant of mental science, can possibly be completely equipped for the work of training the minds of the young. Is this less true of the parent, on whom rests a still larger responsibility for the right use of the rears of early childhood? Once concede the large utility of

Psychology as a part of a course of education that can justly be called in any degree liberal, and but one question remains—viz., at what point in such a course should it receive formal recognition and serious attention? Now, Psychology, whether studied through the soul's own experiences or through the outward manifestation of the spiritual activity of others, must always have its real basis in subjectivity, because we can interpret such manifestations in others only by comparing them with our own experiences made known to us by consciousness. It is therefore true that this subject should be deferred until the mind is able to make successfully what Mr. Bain happily calls the "momentous transition from concrete to abstract." But it will hardly be denied that this ability is not, in the psychical history of a student, postponed until complete and ripe maturity.

I find no difficulty in discovering its place among the more advanced studies pursued in High Schools. My judgment, based upon reason and fortified by careful observation, is that Psychology in its simpler and more elementary forms can be comprehended by any student who finds himself able to see clearly the relations of quantity as exhibited in algebra, or the necessarily obscure dependencies of words as shown in the intelligent grammatical analysis of connected discourse.

The degree of insight necessary for these is adequate to the demands of a first general but yet formal exploration of the contents of the field occupied by consciousness. It seems to me a grave mistake to allow graduates of our High Schools, the vast majority of whom go no further in strictly academic life, to be ignorant of at least the elements of the science of the soul,—to go into the activities of the world with eyes open only to the tangible, the material, and by consequence the temporal, while no serious effort has been made to open the eye of the soul upon what is spiritual and eternal.

It is well to note at this point another fact having practical bearings. A very considerable proportion of the graduates of our High Schools, desiring to enter upon the practice of teaching, seek the necessary professional training in Normal Schools. It would be a great advantage if such could come equipped with a knowledge of at least the elements and of the common terminology of mental science. Lacking this knowledge, there

must be, while this ground is being covered, an expensive delay before beginning a critical study of methods in the several branches and receiving instruction in the general theory and practice of teaching; for the invariable sequence in pedagogical training must be (1) Psychology, (2) Pedagogics (or the science of education), and (3) Pedagogy (or the art of teaching). The last two may be pursued synchronously to reasonable advantage, but it is in the nature of things that Psychology must precede them.

It is a matter of congratulation that the authorities of a considerable number of High Schools have already taken this view of the value of mental and moral science, for these two branches of Psychology are of course indissolubly linked together. One of the chief difficulties encountered in the introduction of psychological study into courses of secondary instruction has been the lack of suitable text-books. A careful perusal of the manuscript of Professor Putnam's book has convinced me that it will amply meet this want. I expect to see it widely and advantageously used in High Schools and in Normal Schools. It is impossible in the space allotted for this introduction to set forth its rightful claims to favorable consideration. It is the outcome of large and thoroughly successful experience in teaching the subject considered, and the fruit of sound scholarship and patient conscientious labor. I have full confidence in its value in the field for which it is designed, and I believe that a fair and thorough examination of its pages will. bring intelligent teachers to the same conclusion.

JOHN M. B. SILL,
PRINCIPAL MICHIGAN STATE NORMAL SCHOOL.

## CHAPTER I.

#### METHODS OF STUDY.

Subject of Study.—The subject of our study is mind. Of the substance of mind, we know nothing. We do not seek to learn what mind is, but what it does. We study its activities, its states, its powers. Several methods of study are open to us.

First Method of Study—Study of Self.—We may study ourselves. We know that we think, feel, and will; that we see, hear, taste, smell, and touch; that we perceive, imagine, remember, judge, and reason. That within us which knows, feels, and wills, we call the mind or soul. We do not know mind, as we do matter, by means of our senses. We can neither see, nor hear, nor touch our minds. Mind is not material and tangible.

Consciousness.—The mind knows itself, and knows its own activities and states. The mind knowing itself and its own activities and states, we call consciousness. We know through consciousness what we think, and how we feel, and when we imagine and remember; we say we are conscious of these acts of our minds. We study ourselves, therefore, through consciousness. In this way, we can investigate all our mental processes. We may by careful self-observation discover how we learn of

form, color, distance, size; of odor, flavor, and the great multitude of objects all about us. We may gain some insight into the wonderful processes of imagining, retaining, and recalling what we have once learned.

Causes, Circumstances, etc. — We can find out under what circumstances we feel joy and sorrow, pain and pleasure, good-will and ill-will, pity and indignation, and the marvelous variety of other feelings. We can discover the causes which excite these feelings in our minds; the circumstances under which they arise, and the means by which they can be controlled, allayed, and entirely removed. We may observe how we are influenced to determine, or will to do or not to do, any act which is proposed to us, and how the will moves all the other powers, both of body and mind, to action. We can learn something of the relation between our thinking and our feeling and willing. We discover that if we think in a certain way, we have a particular kind of feeling; if we think in a different way, we have a different sort of feeling. These and many other things in relation to mind we learn by studying ourselves. This is one of the methods which should always be pursued. Consciousness must be the final judge to decide all disputed questions concerning the action of mind. If consciousness deceives us, we have no way of detecting the deception. We always accept and believe that of which we are conscious.

Second Method — Observation. — We may also study mind by observation. Children are all about

us. They can be observed and studied in the home, on the playground, on the street, in the school. An intelligent observer may commence this form of study at the very beginning of a child's life, watching for the first indications of intelligence in the infant, and noting when and how the senses, one after another, exhibit signs of activity. An observer may discover what forms of mental activity first manifest themselves, and what the order of mental development is, and what is the rate of progress. The mind of a young child may thus be learned to a certain extent, and also the relation of the development of the mind to the growth of the body. The external indications,—the movements of the limbs, the hands, the head, and the eyes, — of mental acts and states can be detected and described. These observations may be kept up through the whole period of childhood and youth, and into the period of maturity. All the steps of a child's progress in physical, mental, and moral development may be noted and registered, together with the apparent influence of times, circumstances, and environment generally. In the school, such observations may be made by any teacher who has made mind a subject of careful study. The effects upon the mind of pursuing different objects and topics of study, the results of different methods of instruction and management can be compared. From such comparisons valuable practical conclusions may be derived.

This method of studying mind and its modes of activity is at the service of every parent and of every

teacher. This method must be employed, to a greater or less extent, by every student of mental science.

Third Method - Books. - A third method is the study of books which treat of the powers and activities of mind, and of its modes of manifestation. This method is a necessary one, but it is often used too exclusively. The study of books should be accompanied always by self-observation and the study of mind as manifested in children, and in all with whom we come in contact. One method supplements another. No one method alone is sufficient. The information derived through one method enables us to confirm or to correct that obtained by another. Truths learned and conclusions reached by the use of all the methods may be regarded as established beyond doubt or successful contradiction. genuine student will combine, as far as possible, these three methods; and will not be over-hasty in drawing inferences, or over-positive in making assertions based upon only a single method of investigation.

Caution as to Books.—A wise caution should be exercised in the selection and use of books upon psychology. Some very learned and valuable works would be simply confusing and bewildering to an immature student at the commencement of his studies in mental science. They are written for those who have bestowed profound thought and long attention to the subject. Some writers, in striving to be deeply philosophical, have succeeded in becoming hopelessly obscure to the ordinary reader. It takes the common mind a long time to find its way

to the ideas of these writers through their involved sentences and peculiar selection of words. Considering the brevity of human life, it is hardly worth while to waste efforts in trying to study books of this kind. The young student will usually find it best to consult the judgment of some competent friend, or other adviser, in respect to the selection of books to be studied upon this subject. If reading alone, read slowly, re-read frequently, think patiently, and make notes, with pen or pencil, of passages which are of special importance.

Obstacles.—There are some obstacles and difficulties peculiar to each method of study. These, if anticipated, can be guarded against and partially avoided. It is the unexpected difficulty which perplexes and discourages us.

In First Method.—By the first method, the mind must observe its own states while they exist, and its own activities while they are going on, or it must study them through recollection. As soon as the mind pauses, so to speak, to examine and analyze its states and acts, these are, to some extent, interrupted and cease to be entirely natural. If the observation is made through memory, after the states and acts have passed, some elements will probably escape notice.

In Second Method.—In the second method, the chief difficulty in the way of reaching trustworthy conclusions, is the limited field open to any one observer. The contents of the minds of young children, and their modes of mental activity, are determined very largely by their immediate environment. Gen-

eralizations will have but little value unless the observations have extended through considerable time, and over a pretty wide field. The field should embrace as many varying conditions and circumstances as possible.

In Third Method.—In the third method, a difficulty is often found in the nomenclature employed. Some authors use terms peculiar to themselves; others use common terms with a peculiar meaning. The reader will most readily overcome this difficulty by translating the author's ideas into familiar, everyday forms of speech. One is not sure that he has fully mastered and comprehended the thoughts of another until he can clothe these thoughts in words of his own selection and arrangement.

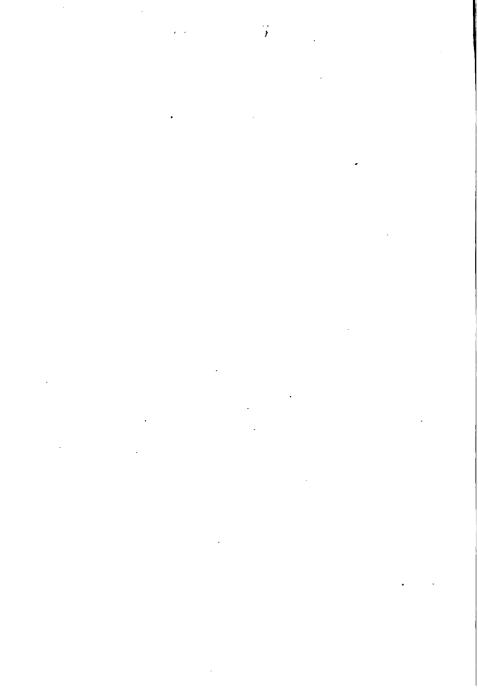
### SUMMARY OF THE CHAPTER - DEFINITIONS.

- Subject of study, not the substance of mind, but its powers and activities.
- 2. First method of study—Self-observation.
- 3. What mind is. What consciousness is.
- 4. What can be discovered by study of self.
- 5. Second method—Observation.
- 6. Observation of the young child.
- 7. Observation in the school.
- 8. Third method—Study of books.
- 9. Methods should be combined.
- 10. Caution as to the selection of books to be read.
- 11. Obstacles.

Mind or Soul.—That in man which knows, feels, and wills. Consciousness.—The mind knowing itself, and knowing its own activities and states.

**Psychology.**—The science which treats of the soul or mind.

•				
	·			
•				
	·			
	,			
	·			
			,	
		•		
		•		
			•	



## CHAPTER II.

#### STUDY OF THE BODY.

Man Complex.—Man is a complex being, made up of body and mind or soul. The terms mind and soul will be used as synonymous in our study, unless a distinction is indicated for some reason in particular cases. Of the substance of mind, as already stated, we have no knowledge. It is assumed to be immaterial, and capable of existing separate from the body. In our present state of existence, the mind manifests itself and its activities only through the bodily organism. For this and other reasons the body, the physical part of man, becomes an important subject of investigation to the student of mind.

Knowledge of the Body Important.—The work of physical education, either in the home or the school, can not be properly performed without a tolerably good knowledge of the anatomy of the human frame and of the laws of health. The various organs of the body, their functions, and the essential conditions of natural and vigorous activity, must be understood. Some knowledge of the most common diseases of childhood, and of the best treatment of persons in cases of sudden illness or of accidents, when the aid of a physician can not be immediately

obtained, is very desirable. It is assumed that students have mastered as much of anatomy, physiology, and hygiene as the common text-books embrace upon those subjects. Attention will, therefore, be given here only to that part of the body most intimately connected with the operation of the mind; that is, the nervous system.

Recommendation.—It is recommended that, at this point, a review be made of the nervous system, as described in some good text-book, unless the subject is quite familiar and tolerably fresh in memory. The manifestations of mind through the various organs of sense will be much more readily and fully comprehended if the mechanism of the brain, of the spinal cord, and of the nerves, is clearly understood. Through these the mind appears to act and to be acted upon. Without them, so far as we can now discover, it would be like a prisoner confined in some dungeon, with walls so deep and thick and high, that no ray of light nor any sound could enter, and from which no sign or sound could come. The mind would dwell, if it could thus exist, in perpetual silence and darkness. Through the brain and nerves it makes itself known, and learns of the world by which it is surrounded. The nerves and organs of sense have been most appropriately called "the gateways of the soul." Through them the mind and the outer world meet and hold intercourse.

The Cerebro-Spinal System.—The general nervous system, called the cerebro-spinal system, consists of the brain, the spinal cord, and the nerves proceeding

from these. The position, form, and general character of the brain and spinal cord are presumed to be, understood sufficiently well for our present purpose. Only a few statements, therefore, will be presented here, borrowed from sources readily accessible.

The Brain. — The brain, as a whole, includes the cerebrum, the large central mass; the cerebellum, or little brain; the pons varolii, or bridge; and the medulla oblongata, an enlarged continuation of the spinal cord within the skull. In a restricted sense, the term brain is often confined to the cerebrum, both on account of its greater size and of its probably superior position, in connection with manifestations of mind. Supposing the entire brain mass to weigh 50 ounces, of these, the cerebrum is said to make 44, the cerebellum 5, and the other parts 1. Among adult Europeans and Americans, the average weight of the male brain is 49 to 50 ounces, and of the female brain, 44 to 45 ounces. The weight of the brain, as compared with the weight of the whole body, is about the same in both sexes. This relative weight differs considerably at different periods of life, being greatest at birth and in childhood.

Intellectual Power and Size of Brain.—Great intellectual power is usually associated with a large brain; but many exceptions are found to this general rule. Evidently quality, although not easily defined when predicated of the brain, is as important as quantity. If, however, the weight of the adult brain falls below thirty ounces, imbecility may be anticipated. The brain attains nearly its full size as

early as the eighth year, but the weight continues to increase slowly until the fortieth. A slight diminution of weight takes place in old age, usually accompanied by a loss of mental vigor and activity. A healthy development of the brain in a child is a necessary condition of the exhibition of intellectual energy. The immature brain should be only lightly taxed, and precocious mental activity should be wisely and cautiously checked rather than encouraged and intensified. No regular and severe mental labor can be safely imposed until the brain has attained nearly its maximum size; and the age for entering any school, except a kindergarten or some similar institution, should be fixed at about this period. The teachings of physiology and experience upon this point are in perfect accord. Considerable development of body, and more particularly of brain, is a necessary prerequisite to effective work in the school

The Sympathetic System.—In addition to the cerebro-spinal system is the so-called sympathetic system, consisting of nerves and nervous matter in the form of ganglia. As this system has but little direct connection with the phenomena of mind, it is unnecessary to give it consideration here.

The Nerves.—The brain, the great center of nervous force, exerts its own power from within, and is reached by agencies and influences from without, through nerves which have their origin in it, or in the spinal cord. These nerves are small cords of yish-white color, composed of numerous minute

fibers and bundles of fibers, terminating externally in the skin, muscles, and all parts of the body. Connected in many places with these cords, are collections of nerve cells, called ganglia, which appear to be important auxiliaries to the nerves, re-enforcing and intensifying their action, and, in certain cases, intercepting the direct movement, and producing what is called reflex action.

Peculiar Office of the Nerves. — The peculiar property of nerve fibers is a susceptibility of being impressed or excited by certain causes or influences called stimuli, and of transmitting or conducting such impressions or excitations with very great rapidity. Comparison has often been made between the office of the nerves and that of the telegraphic and telephonic wires. They serve as means of instantaneous communication between the various parts of the body, between the extremities and the internal nerve centers and the brain, and, by a process of which nothing is yet known, between the external world and the mind. If they are paralyzed by disease, or severed by accident, all communication ceases, as it does when the telegraphic wires are cut.

Sensory and Motor Nerves.—Some nerves receive impressions or excitations only upon their external terminations, and convey these excitations within to the nerve centers and the brain. These are named afferent and sensory nerves. Other nerves are excited by causes or stimuli within, and transmit such excitations to their outward extremities. These are

called efferent and motor nerves. Through the action of these nerves upon the muscles all movements of the body are effected. It is possible that some nerve fibers are capable of transmitting impressions in both directions.

Nerves and Organs of the Special Senses.—A few nerves are capable of being excited by only one kind of stimulus, and of transmitting only one kind of excitation. Such nerves and the external parts in which they terminate constitute the organs of the special senses. These are of peculiar interest to the student of mind and the teacher, as they are pre-eminently the avenues of communication between the external world and the center of intelligence within, and the only media through which the materials of knowledge can be given and received.

Knowledge Presumed.—The structure of the organs of the special senses, and the location and forms of the terminal ends of the associated nerves, are presumed to be well known. It will, therefore, be necessary here only to refer to the kind of stimulus by which these nerves are affected, and to the character of the impressions which they convey, and the peculiar knowledge consequently derived through them.

Smell.—The olfactory nerves, the nerves of smell, terminating in the nasal passages, are excited by odors. The excitement is produced by the inhalation of air filled with floating particles of odorous matter. These particles, coming in contact with the

extremities of the nerves, make an impression or irritation which is instantly conveyed along the nerve fibers. The final result is a knowledge of the various kinds of smells.

Taste.—The gustatory nerves, the nerves of taste, have their terminations in papillæ, found chiefly on the tongue. The ends of these nerves are excited by the contact of matter passing over the tongue in a state of solution. The transmission of this condition of irritation results finally in a knowledge of flavors or tastes. The activities of smell and taste are often very closely connected, and then the conclusion reached depends upon the concurrent or united testimony of both senses.

Hearing.—The auditory nerves, the nerves of hearing, terminate in the cavities of the complex internal ear. They are affected by the vibrations of the medium in which their ends are distributed, and this medium is set in motion by the vibration of the air and of other external substances. These excitements of the auditory nerves, conveyed inward, are at last translated into a knowledge of the almost infinite variety of sounds.

Sight.—The optic nerves, the nerves of sight, with their terminations in the retina of the eye, are affected only by the action of light, and primarily appear to give us knowledge of color and form. Assisted by touch and hearing, sight, undoubtedly, gives us notions of distance, size, roughness, smoothness, and of some other qualities of objects, at a very early period of life. It is not easy to draw clearly

and positively the boundary lines of the province of this sense.

Touch, etc. — The nerves of touch, unlike those previously named, do not consist of a single pair, but are very numerous and widely distributed. In fact, it might be said that they include all the nerves, excepting those just described, which have their terminations at or near the external surface of the body, and also within the mouth. The information derived by means of these nerves is very extensive and most diverse in its nature, and might well be divided and assigned to different nerves, if physiology would permit us to do so. Touch, proper, involves pressure, and this necessitates muscular exertion, consequently muscular and nervous action become united and confused, and the resulting knowledge is due to this combined activity, By the tactile nerves and associated muscular exertion, we learn softness and hardness, roughness and smoothness. Within narrow limits, we are also made acquainted with size, shape, position, and distance. Contact, also, involves temperature, the notion of heat and cold. This, however, affects us without actual contact with the hot or cold body, by radiation and the circulation of air.

Bodily Feelings.—There are many bodily feelings, the knowledge of which can not be referred directly to any of the special nerves, nor to the more widely extended nerves of touch. Such are the feelings of hunger and thirst, of comfort and satisfaction attending the proper digestion of food, and generally the

ordinary activity of the physical organism in a state of health, the discomfort and dissatisfaction attending fatigue, indigestion, ill-health, and unnatural and constrained positions of the body. All these feelings, and many others of similar character, have their origin, without doubt, in impressions made by some means upon some part of the nervous system. They are sometimes grouped together under the general name of organic feelings.

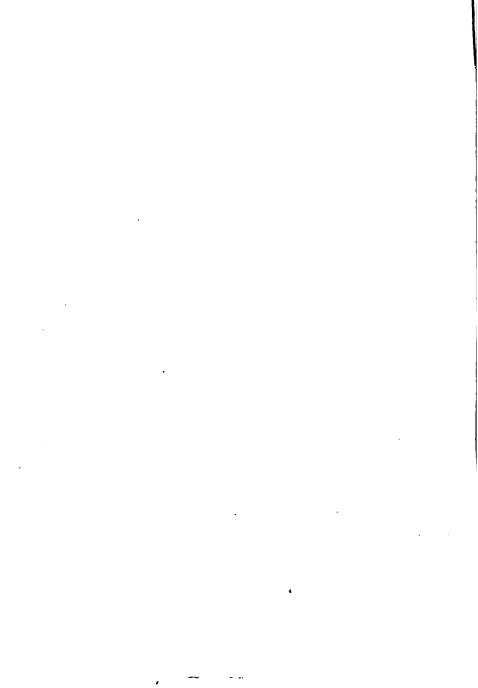
Intimate Connection of Body and Mind.—This brief review of the nervous system reveals, to some extent, the intimate connection between its activities and the activities of the mind. The brain and nerves appear to be the physical mechanism through which, in its present mode of existence, the soul is touched and affected by the surrounding world, and also the means through which, in turn, the soul makes known its powers and activities. The perfection and good condition of the mechanism must naturally increase the efficiency of the force working through it.

## SUMMARY OF THE CHAPTER.

- 1. Man complex body and mind, or soul.
- 2. Assumptions as to the soul.
- 3. How only the mind can now manifest itself.
- 4. Knowledge of the body important and necessary.
- 5. Review of nervous system recommended.
- 6. Condition of mind without the nerves of sense.
- 7. The cerebro-spinal system. The brain.
- 8. Relation of intellectual power to size of brain.
- 9. The sympathetic system.

- 10. The nerves peculiar office.
- 11. Sensory and motor nerves.
- 12. Nerves and organs of special sense.
- 13. Smell, taste, hearing, sight, touch. The general knowledge derived through each of the senses.
- 14. Some bodily feelings, and the source of these.





## CHAPTER III.

#### SENSATION AND PERCEPTION.

Position of the Child. — With the nervous organization which has been partially described in a previous chapter, the child, in the weakness and ignorance of infancy, finds itself in the midst of a world of material objects, and of influences and forces. These act upon the sensitive nervous organization, particularly upon the nerves of the special senses. At every turn, some object or influence irritates, stimulates, excites, or, in some way, impresses the nerves of smell, taste, hearing, sight, or touch. These irritations, or impressions, made upon the outer extremities of the afferent nerves, are transmitted by some action of the nerve fibers inward to the nervous centers, and finally, in some unknown and mysterious way, to the great center and seat of intelligence, the mind. They produce a peculiar state of mind, or a change of state, which can be named, but can not, in the proper sense of the word, be de-These states, or changes of state of mind, are known only by consciousness.

Sensation. — This state, or change of state of mind, caused by impressions upon the nerves of sense, is called sensation.

First Conscious Mental Activity. — At this point,

without doubt, the first conscious activity of mind begins. This activity is that of discrimination and comparison. The mind is conscious of a change of state; a sensation of sight, hearing, taste, or smell is experienced. Sensations are repeated, and different sensations are experienced through the various senses, and through the same sense, different sensations of color, sound, touch, and taste. These repetitions of the same sensation, and the different sensations, are immediately known in consciousness; are examined, compared, and pronounced to be alike or unlike, similar or dissimilar, as the case may be. The resemblances and differences, the likenesses and unlikenesses, are very slowly and gradually noted and fully distinguished, and by degrees are permanently fixed in memory, so that a sensation when repeated is recognized as having been previously experienced. The child's early activities of discrimination, comparison, and reproduction or recollection, are undoubtedly very feeble and imperfect, but that such activities commence here is beyond question.

Illustration.—The physical and mental processes may be readily illustrated. A pin pricks the finger of a child. The nerve fibers of touch are irritated, and the feeling of irritation is conveyed along the nerve. A sensation is experienced by the child. The prick is repeated with a similar result; another sensation is felt. The sensations are discriminated as two, and the second is declared to be like the first. There is a consciousness of the relation of likeness resulting from comparison.

Memory Begins to Act. — Evidently the knowledge of the peculiar characteristics and nature of the first sensation must have been retained, or no comparison could have been made. If some time, however little, intervenes between the two pricks, then clearly the activity of reproduction and representation, or memory, must also have begun.

Illustration.—Suppose a rose, concealed from sight, to be brought into the room, or near a child who has hitherto had no acquaintance with the smell of flowers. The odor, floating in the air, touches the nerve of smell, and the child is conscious of a sensation, though he can give it no name. The rose is removed, and a fragrant lily is brought in its place. The child recognizes at once a difference between the two sensations, while utterly unable to name or describe either. The two have been compared, and a decision pronounced that they are unlike. knowledge of the first must have been retained and reproduced, or the comparison could not have been made. These processes must be going on continually in the mind of a child from the moment when the nerves of sense began to be impressed by objects and influences about him.

Only Sensation at First.—At first, sensations must exist entirely alone. They are simply states of mind, internal experiences, for which no causes are known. The child is merely conscious of states of soul. Every thing thus far is within; acquaintance with the external world has not commenced.

First Knowledge—First Step in Education.—The

child's first acquisition must be a knowledge of sensations, and the first step in the process of education must consist in cognizing, comparing, and discriminating, sensations.

Second Step.—Sensations are, so to speak, the raw material of knowledge. The conscious activity of the mind begins as soon as these are experienced. Until they are felt, no mental life or activity can be discovered in the child. Through them the mind learns of the existence of an external world and comes into acquaintance with it.

What Follows.—Very soon after the mind becomes conscious of sensations, it begins to attribute them to external objects as causes. How early, or in what way, this process commences it is impossible to determine, nor is it possible to determine the nature of the process. We know that in some way, through the organs of sense, the soul learns of the existence, position, size, form, color, and other qualities and characteristics of material things.

Perception. — This act of the mind in knowing external objects immediately and directly, is called perception. Since this knowing is through the senses, it is often called sense-perception. The ability of the mind to perform this act of knowing is usually called the faculty or power of perception. It may properly be called the perceptive activity, or the activity of perceiving.

A Percept. — The complete mental product of the act of perceiving is called a percept, while the object perceived is present. The percepts of sight, when

recalled, appear as perfect pictures or images in the mind; those of touch are pictured or imaged, but less clearly and distinctly than those of sight. It is doubtful if the percepts of taste, smell, and hearing can be imaged. They are designated by an indefinite term, as ideas.

Conditions of Perception.—The conditions of perception are (1), a physical organism capable of being excited or impressed by external objects and influences, and of conveying these impressions. Such an organism is called the sensorium; (2), objects or agencies to impress or excite the sensorium, so as to produce sensations; (3), a mind immediately conscious of the sensation, and ready to attribute it to the external cause, or to know the object in consequence of the sensation.

Conditions—Physical and Psychical.—The conditions are partly physical and partly psychical (or mental), and they are so intimately associated as to be incapable of complete separation.

Relation of Sensation and Perception.—The activity of mind in perception is much greater and more productive than in sensation; but sensation is the necessary antecedent of perception; and perception, in most cases, is the necessary and immediate result of sensation. The mature mind, unless so preoccupied as to be practically unconscious of impressions from without, instantly refers sensations to their cause, and perceives the exciting object. The rapidity with which this is done is, without doubt, the result of experience.

Rapidity of Action.—In many cases, no appreciable time intervenes between the sensation and the perception. This happens when sensations have become familiar by frequent recurrence. A new and strange sensation can not be instantly localized, or referred to its source, even by an adult. The reason is obvious.

Activities Involved.—The process of perception involves the fundamental activities of mind, already mentioned in connection with sensation. Percepts and images must be discriminated and compared, and this comparison frequently makes retention and reproduction necessary.

Illustration. — For illustration, an object of sight is presented to me, which I affirm to be a peach. This affirmation is an act of judgment, and must result from a comparison of my present percepts with former percepts retained and reproduced. To use a common mode of speech, I must remember the appearance, smell, and taste of some peach previously examined, and must compare the object now before me with my recollection of that. The young child, in order to recognize distinctly to-day an object like one seen yesterday, must go through the same process; and his inability to make the recognition readily is owing partly to the feebleness of the power of memory, and partly to lack of distinctness in his previous percepts.

Perception Complex.—It will be noticed that the mental activity of perception, though apparently simple, is really very complex. It involves the in-

cipient activity of some of the highest intellectual powers.

Second Step in Education. — Perception is evidently the second kind of conscious psychical activity of the child, and the second step in the process of his education.

First Work of the Teacher.—The first step, so far as the teacher is concerned, must consist in developing and training the perceptive power to act readily, accurately, and rapidly. Such development and training form the basis of all subsequent progress and acquisition. The senses are the external organs of the perceptive activity, and their proper cultivation is the main work of the primary school.

Original and Acquired Power of the Senses.— Each of the special senses has original or native power to furnish a species of knowledge peculiar to itself, and not given by any of the other senses. The knowledge originally supplied by each sense has already been stated.

Acquired Perceptions.—An important fact, with which we are all familiar, remains to be noticed. We find one sense doing the original work of another sense by an acquired power. The possibility of the acquisition of such power is a most beneficent provision. Without it, the loss of any sense would be an irreparable misfortune. As things are, one sense can, to a considerable extent, take the place of another, and perform its special duties. Touch and hearing come to the aid of the blind,

and touch and sight to the help of the deaf. Smell and taste, in a less degree, may exchange offices.

Examples of this Acquired Power. - Examples of the use of this acquired power are so common that they scarcely need to be mentioned. We are constantly and often unconsciously employing it in the every-day business of life. We say an object looks rough or smooth, heavy or light, hot or cold, judging by sight, in respect to qualities which were originally learned by touch and muscular exertion. We tap lightly with a hammer the wall of a room, and pronounce it hollow or solid; we strike the end of a barrel with a stick, or touch it with the foot, to determine whether it is full or empty, employing the ear to gain information which the eve at first gave us. The processes by which a very high degree of this wonderful power can be attained, as illustrated in the education of the deaf, dumb, and blind, are exceedingly interesting, and should be carefully studied by every teacher.

Laura Bridgman.—One of the most remarkable and interesting illustrations of the power of one sense to supply the place of another, and even of two or three others, is found in the story of the life and education of Laura Bridgman. At a very early age she was deprived of the sense of sight and the sense of hearing, and almost entirely of the sense of smell. Through the sense of touch alone she mastered all the common branches of study. She learned to recognize her friends by even the slightest touch of their hands, or of their dress, and to do a great number

of other things which seemed to require perception through sight. Her biographer says: "She knows how different people laugh, and often speaks of the sweet smile of one and another. It may be thought that she must be always feeling of the face, and thus make herself disagreeable; but this is not so, she rarely touches it, and yet judges correctly."

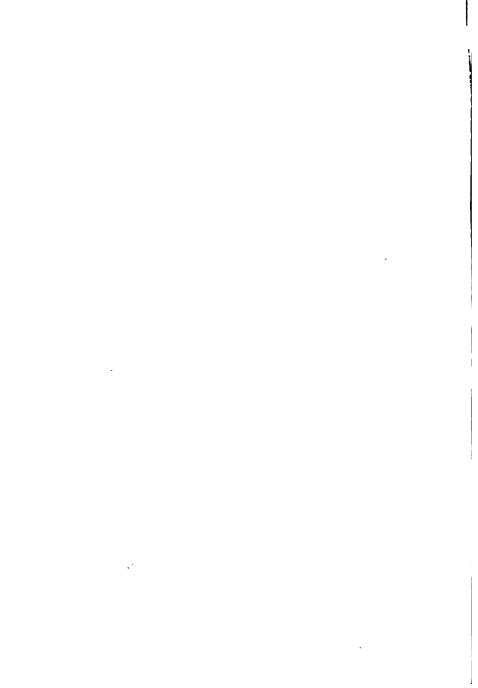
Helen Keller. — The most remarkable illustration of the rapid acquisition of knowledge through the sense of touch is seen in the recently reported case of Helen Keller, a young girl living in Alabama. At the age of about nineteen months she lost the senses of sight and hearing. No special efforts were made for her education until she entered her seventh year. At that time she was placed in charge of a very competent teacher. Her progress was almost beyond belief. Within four months she learned "more than four hundred and fifty common words which she could use correctly, and spell with perfect accuracy." A careful study of the methods employed in teaching the blind and the deaf and dumb and the results of these methods will give the parent and the ordinary teacher much very valuable knowledge.

#### SUMMARY OF CHAPTER III. AND DEFINITIONS.

- 1. Position of the young child in the world.
- 2. Process by which sensations are produced.
- 3. Sensation defined.
- 4. First conscious mental activity of the child.
- 5. Process illustrated.
- 6. Beginning of the activity of memory.
- 7. Illustration by use of flowers.

- 8. Sensation must stand alone at first.
- 9. First step in education.
- 10. What follows sensation immediately.
- 11. Perception defined. Percept defined.
- 12. Conditions of perception—the three.
- 13. Relations between sensation and perception.
- 14. Rapidity of mental action.
- 15. Activities involved in perception.
- 16. Illustration of a peach.
- 17. Perception as a process complex.
- 18. Second step in education.
- 19. First work of the teacher.
- 20. Original and acquired powers of perception.
- 21. Importance of the acquired powers.
- 22. Examples from every-day observation.
- 23. Laura Bridgman.
- 24. Helen Keller.
- Sensation.—A state of mind, or change of state, caused by an impression upon a sensory nerve.
- **Perception.**—(1.) As a *power*, the ability of the mind to know immediately and directly the external world, or objects outside of itself.
  - (2). As an act, the mind knowing immediately and directly the external world, or objects outside of itself.
- **A Percept.** —A complete mental product of the act of perceiving.
- The Sensorium.—That part of the physical organism which is capable of receiving and conveying impressions from external objects and influences to the mind.





# CHAPTER IV.

#### INTUITION .- INTUITIVE IDEAS AND TRUTHS.

Knowledge Obtained through Consciousness.— Through consciousness, we know ourselves and the activities and states of our own minds. It is inner perception, the perception of our thoughts and feelings.

Knowledge through the Senses.—Through the senses, we know the external world,—the colors, forms, and other qualities of material objects.

Another Form of Mental Activity.—Intimately associated with consciousness and sense-perception, is another form of mental activity. The power of the mind to exercise this form of activity has received various names, no one of which is perfectly satisfactory.

Related Knowledge.—The knowledge given us by this activity, although altogether unlike that furnished by perception, is nevertheless very closely related to that knowledge. Consequently, this activity is most naturally and properly put into the same class with consciousness and sense-perception.

The Relation.—The knowledge gained through perception seems to be a necessary preparation for obtaining and understanding that of which this activity is the source. When the first has been

acquired, the second appears to come of itself by some law of mind, but not by any process of reasoning. We notice a few of the ideas derived through this mental activity.

Idea of Space.—A book is on the table before me. I move this book to another place. What is now where the book was? What was where the book is? What is it which I myself occupy, and all the objects about me? If none of these objects existed, what would be where they now are? We call that which we and the objects about us occupy, space, and when the objects are removed, we call the place where they were, empty space.

But what is space? Has it qualities by which any one of the senses can know it? Can it be touched, seen, or tasted? Evidently, space is not known through the senses. The idea of it must come into consciousness in some other way, and from some other source.

How the Idea Comes.—It seems to come of itself. It springs up, so to speak, spontaneously as soon as there is need of it or use for it. The nature of the mind is such that when it learns of the existence of matter, of objects which occupy space, it immediately has the idea or notion of space. It comes intuitively, or by intuition, and the idea is called intuitive, or an intuition of the soul. The power or activity of mind which produces it is called intuition, or the intuitive power.

Space Measured.—By force of necessity, we speak of space as having extension, but we are unable to

tell what it is which is extended. No other qualities or attributes can be applied to it. Space is supposed to be unlimited in extent, but the mind can not comprehend the unlimited. We speak of measuring portions of space, as we speak of measuring bodies, and give it three dimensions. No natural units for measuring space or bodies have yet been discovered.

Idea of Duration—Changes within Us.—During our waking hours, we are conscious that ideas and thoughts are constantly coming and going in our minds. Just now we had such an idea; it is gone. We have another, and presently still another. This process is ever repeating itself. Changes take place within us.

Changes about Us.—We look out into the world about us. One person passes along the street, and then another. Clouds appear and disappear above us. Day and night follow each other; the seasons come and go in regular order. We discover changes taking place every-where.

Succession. — Thus, both by consciousness and perception, with the aid of memory, we become familiar with the fact of succession. We know that thoughts within the mind and events in the world are ever following each other.

How the Idea of Duration Comes. — Having learned so much, the idea of what we call duration immediately appears in the mind. This, evidently, is another intuitive idea; and, without question, the same power of the soul which gave us the notion of

space has also given us the notion of duration, since it has no qualities by which the senses can know it, or bring it into the mind.

Time.—Like space, duration is believed to be unlimited, but some convenient natural units have been discovered by which it may be divided or separated into limited portions. These limited portions are called time, and they are subdivided in various ways and for various purposes.

Units of Duration.—These units of measurement are obtained by the observation of certain regularly recurring events in the natural world. The daily revolution of the earth on its axis affords one unit. The annual movement of the same body in its orbit around the sun furnishes a larger unit. Other movements among the stars may supply still larger units. By these means we have divisions of duration, called days, weeks, years, centuries, and cycles of time.

Other Intuitive Ideas.—Many other ideas seem to have the same intuitive origin. Among these, are the ideas of cause and effect, of personal identity, of right and wrong, and probably that of a great, first Cause of all things.

Ideas and Truths Distinguished.—Truths, as well as ideas, are intuitive in character. The two should be carefully distinguished from each other. An idea, as the term is here employed, denotes a single mental notion, image, or picture, as that of space, or time, or that of a tree, a book, or a house. The notion or picture stands alone; nothing is affirmed or denied of it. It has no relation to any thing else.

Expression of Truths.—On the other hand, the expression of a truth must contain at least two notions or ideas, and must form a proposition or full sentence. Something must be affirmed or denied. When I say an apple, a tree, I express only ideas; nothing is affirmed of the apple or the tree. Each picture stands alone. When I say an apple is a fruit, two ideas are expressed,—one of a something which is called an apple, the other of something called fruit, and a relation is declared to exist between the two. If the relation is correctly stated, a truth is expressed; since the truth of all statements consists in this, that the relation affirmed to exist really does exist.

Intuitive Truths.—Now, the relations between some things are of such a nature, are so obvious, that the mind recognizes them as true as soon as they are affirmed, and assents to the statement of them instantly without reserve or hesitation. Such truths are called axioms. They are also called intuitions of the mind, or intuitive truths. The intuitive power or activity of the soul recognizes, accepts, and holds fast to them, whenever there is occasion for their recognition and use.

Characteristics.—Such truths have certain easily recognized characteristics, some of which are the following: (1.) They are simple; that is, they can not be resolved into other truths. The propositions by which they are expressed can not, by any analysis, be made clearer or more simple. (2.) They are necessary; that is, a denial of them involves an ab-

surdity. (3.) They are universal; that is, we can conceive of no time or place in which they will not be true. (4.) They are, consequently, primary and fundamental; they admit of no proof; they are not reached through observation or experience.

Examples.—It is impossible, for example, to think that a person or thing exists and does not exist at the same moment of time; that two things can occupy the same space at the same time; that the whole is greater or less than the sum of all its parts; or that there is no distinction between right and wrong. Truths of this kind constitute the ultimate basis of all reasoning. If they are denied, no common starting-point can be found, and, consequently, no progress can be made in the acquisition of new knowledge. All such truths are called intuitive and self-evident.

Intuition Defined.—Intuition may be defined as the power of mind which makes us acquainted with simple, primary ideas and truths.

Important to the Teacher.—It is of high importance in the education of children that the teacher understand clearly the origin and nature of such fundamental truths. The intuitive activity is not susceptible of culture in the sense in which the perceptive activities are. It does not require such culture, since it is sure to act, in every normally constituted mind, whenever circumstances call for such activity. This is to be assumed, and instruction should proceed upon this assumption. The ideas of cause and effect, of space and time, and others of

similar character, will occur to a child when they are needed. Simple axiomatic truths will be recognized and accepted, and used at the proper stage of mental development. They may require illustrations, but not proof. Attempts to prove the self-evident only result in bringing it into the region of doubt and uncertainty. The mind of the learner is confused thereby, and positive harm is done.

#### SUMMARY OF CHAPTER IV. AND DEFINITION.

- 1. Knowledge derived through consciousness.
- 2. Knowledge derived by sense-perception.
- 3. An activity of mind associated with these.
- 4. Relation of the knowledge obtained by it to that derived through perception.
- 5. Idea of space.
- 6. Idea of time.
- 7. Divisions of duration and units of measurement.
- 8. Cause and effect.
- 9. Some other intuitive ideas.
- 10. Difference between ideas and truths.
- 11. Characteristics of intuitive truths.
- 12. Results of trying to prove the self-evident.

Intuition.—The power of mind which makes us acquainted with simple, primary ideas and truths.

#### SUMMARY OF MENTAL POWERS THUS FAR STUDIED.

Similarity of these Activities.—The mental powers thus far considered have certain common characteristics, and may be grouped into one class. Through all of them we acquire knowledge directly and immediately. They bring us, so to speak, face to face with the things to be learned. There is no round-

about process, no inferring, concluding, or reasoning. know by a single effort, without any mediating or intervening agencies.

Original Sources of Knowledge. — They are thus original and primary sources of knowledge. That which is learned through them is the basis of all other acquisitions in knowledge. They furnish the material upon which all the other mental powers act. And the information which they give us, when in a normal condition, can not be doubted. Men trust implicitly in the evidence of their senses, in the testimony of consciousness, and in the teachings of intuition. From their decisions, no appeal can be made successfully. Various names have been given to these psychical activities. A distinct idea of the nature and office of a power is of more importance than its name. We will call them perceptive and presentative activities, and associate them in the order following:

Perceptive and presentative | 2. Sense-perception, outer perception.

- 1. Consciousness, inner perception,
- activities of the mind. . . ] 3. Intuition, intuitive perception of primary ideas and truths.

Sensation is not counted as a distinct form of mental action, but is considered as the means through which sense-perception takes place, and as a part of that complex process.





# CHAPTER V.

# REPRESENTATIVE AND REPRODUCTIVE ACTIVITIES.

Other Mental Activities.—In connection with consciousness and perception, other activities of mind have been referred to, but not described in detail. These activities are of such a character that they can not manifest themselves until material upon which they can act has been furnished through sensation and sense-perception. The natural order of mental development and action may be here observed.

Recognition of Objects by the Child.—The child first sees objects, hears sounds, touches, tastes, and smells things which affect these senses. As objects of sight, touch, and so forth, are brought again and again before him, he comes, after a little time, to recognize them as having been previously seen, touched, or tasted. He is now said to know them. This recognition of objects must involve a comparison of the present sensations and percepts with previous ones recalled and pictured, imaged, or in some way represented in the mind. The present percept of a white rose, for instance, now seen, must be mentally placed alongside the recalled or remembered percept of the same rose previously

' seen. The two are compared, and if they seem to be the same, the rose is recognized. The same process is involved in the recognition of sounds, smells, and tastes, and of all objects of sense-perception.

Recognition by the Name. -- Another and a little more difficult exercise of this representative activity is manifested when the child becomes able to recognize objects by their names when the objects themselves are not present. In this case, when the name is pronounced, an image, notion, or some representation of the object must be formed in the mind. A child who has been taught the primary colors and their names, when directed to go to another room and bring a red card, selecting it from a number of cards of various colors, must be able to represent to himself the color red before he can make the selection. The same is true of fruits, flowers, and all other objects which are to be recognized when named. In these and similar cases, the former percepts are recalled and represented by having been associated with the names, and the immediate percepts of the objects, when brought before the senses again, are compared with the recalled percepts. The principle by which this association takes place will be considered in another connection.

Process in Listening or Reading.—A similar but more extended process of reproduction and representation takes place whenever one listens to conversation, stories, or any description, or reads for himself from the printed page. As the speaking or reading goes on, the pictures, images, ideas, or notions pre-

viously associated with the words, are mentally reproduced and represented. Unless this can be done, the speaking or reading is not intelligible. In this case, we do not represent the precise objects which we ourselves have personally known, but persons, places, scenes, and events new to us, but similar to those which we have known through our own experiences. In this way, we represent in mind cities, landscapes, mountains, and other objects which we have never visited.

Example by an Orange.—A common, every-day process of reproduction and representation may be illustrated by placing an orange before us. We learn by sight its color, form, size, and the appearance of its outer surface. By touch, we discover whether it is smooth or rough, hard or soft, and, by muscular exertion, whether it is light or heavy. By smell, we learn its odor, and by taste, its flavor. We have partial percepts of sight, touch, smell, and taste. Combining all these, we have a complete and full percept of the orange.

The Representation.—Let the orange now be taken away. We find ourselves able, by a little mental effort, to form a picture or image "in the mind's eye" of the orange. We seem to see its color, form, size, and the peculiar appearance of the rind. All that we learned by sight appears to be perfectly pictured; what we learned by touch, partially so. We find ourselves unable to form an image or picture of the smell or taste. Nevertheless, we have a represented idea or notion of these qualities with

which we can readily compare the smell or taste of another orange, or of any other fruit brought before us. This mental picture represents to us the orange. It appears to be the reproduced percept.

The Representative Power, or Simple Conception.—This mental activity which forms pictures, images, ideas, or notions, of things not present to the senses is the representative power or representation. It may also be called simple conception, the term simple being employed to distinguish it from conception proper, which is described further on. The mental products of this activity may be called images, simple concepts, and ideas. Concepts proper, expressed by such terms as animal, man, horse, flower, and other common names, are considered elsewhere.

Feelings not Represented.—Feelings are apparently incapable of reproduction and representation. The idea of a feeling, or, in common language, the recollection of a feeling, can be brought before the mind. I can represent to myself the fact that I was angry, and the circumstances connected with the feeling, but the anger itself refuses to be reproduced.

Effect of Ideas.—Under some peculiar conditions, the revived idea and the reproduced image of the cause of the feeling may bring about a recurrence of the feeling itself. It is said that a very vivid-representation of an object which has caused nausea, will sometimes produce a return of that feeling. The same is probably true of some mental feelings.

Retention. — Reproduction necessarily presupposes retention. The differences of opinion in respect to

the subject of retention are very wide, but are of little practical importance. We know that by some means, and upon certain conditions in the acquisition, the mind keeps what it learns. It will be sufficiently definite for our purpose to consider retention as the holding by the mind, out of consciousness, of that which it has acquired, subject to reproduction when called for.

Real Representation.—In the examples of representation thus far considered, the images, ideas, or concepts, are believed to be truthful and accurate mental representations of the objects, scenes, persons, places, and other things represented. The purpose of the psychical activity is to reproduce, if reproduction is necessary, and to image things just as they are, or are supposed to be. This is not the office of imagination. This form of representation may, therefore, be called real representation to distinguish it from another form to be presently described.

Another Kind of Representation. — We are conscious of an activity of mind which, in some cases, gives us products closely resembling real representations, but, in other cases, very unlike these. The psychical activity of simple conception or real representation furnishes us with a great variety and an almost infinite number of truthful pictures, images, and representations. This activity of mind takes these truthful concepts, groups and combines them to form complex images and pictures unlike any single existing original. Such products are called ideal pictures or representations.

An Illustration. — For illustration, a painter selects accurate pictures of individual objects and scenes from a number of widely separated localities. From one he takes a mountain, from another a valley, from a third a grove and hill, from the fourth a lake and river, and so on, until he has all the materials which he desires. These he combines into a beautiful ideal landscape. Each individual feature of this ideal picture is true to nature, but the groupings and arrangements of the parts are made according to the taste and will of the artist. He has created, not the material, but the design or plan.

Another Illustration.—A writer gathers accurate descriptions of persons, events, and places, from different sections of a country, or even from different countries. These various persons, events, and places are in no way connected or related to each other. Out of this material, he produces a consistent and entertaining story, in which every part appears to sustain a natural relation to all the other parts. Each person, each event, each scene, falls into its own proper place, and the whole story proceeds as naturally as if it were a narrative of real life. This is an ideal literary production, as the other was an ideal painting.

Imagination Proper. — The activity of mind by which ideal pictures and writings are produced is ideal representation or imagination proper. This form of imagination is a creative power only in one respect. It does not create the material which it uses; it selects, modifies, arranges, and combines. It

does create new plans and combinations. In this way, it seems to make a new world, and to place us amid new surroundings and in new relations. Its work may be compared to that of the builder, who, out of a shapeless mass of stone, iron, and wood, gathered and heaped up by others, constructs a grand and beautiful palace, bringing order out of confusion; grace, beauty, and symmetry out of ugliness and deformity, and rendering attractive that which was before repulsive.

Two Activities Confounded.—Imagination is often confounded with fancy or phantasy. The two names are frequently used to denote the same mental power. This usage can claim the support of much and good authority. It is better, however, to make a distinction, and to employ the two terms to indicate two different but closely related activities of mind. Imagination and fancy, alike, select and combine individual percepts, concepts, ideas, and images to fashion from them complex ideal products.

Imagination Subject to Law.—But imagination combines and arranges within the limits of possibility. It is subject to law. It can be said of any legitimate creation of the imagination: "This is possible; such a thing may be, or may have been." The work may border hard upon the improbable, but it is not beyond the limits of what can be conceived.

Fancy Lawless.—On the other hand, fancy combines according to its own will and pleasure. It regards neither law, order, nor possibility. It pro-

duces the incongruous, the fantastic, and absurd. It revels in the wildest and strangest scenes, and amid the most grotesque and ridiculous surroundings. Fancy might be regarded as imagination run mad, and roaming unchecked and uncurbed. The vagaries of fancy sometimes bring discredit and reproach upon the imagination, which, when properly employed, is one of the highest and nobles activities of the soul.

Different Forms of Imagination.—That form of imaginative activity, just described, is often called the poetic or æsthetic imagination. Its activity, however, takes other and more practical directions. It finds legitimate employment in mathematical and scientific studies, and in the processes of invention and construction. It combines isolated and barren facts, scattered without order or value, into ingenious and plausible hypotheses; and out of such hypotheses builds bridges across the gulf which separates the known from the problematical and possible. By and by, many of these hypotheses are gradually transformed into theories, and later into accepted scientific knowledge.

Other Uses.—Imagination is one of the great agencies of discovery both in the material world and in the realm of thought and reason. It is serviceable alike in the school and the workshop. With the help of imagination, under the guidance of skillful teaching, the child creates a real world from the dull and uninteresting lines and marks upon maps and globes. With the same assistance, he reproduces from the

pages of history thriving villages, crowded cities, populous kingdoms, and all the varied activities of real individual and national life.

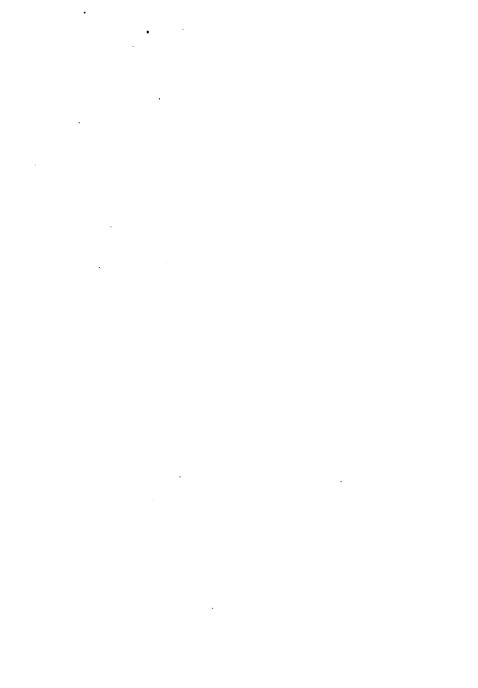
These Activities Manifested Early.—The activities of simple conception, imagination, and fancy manifest themselves very early in the child's life; but, at first, in very crude and imperfect forms. The activity of real representation, or simple conception, must follow close upon that of sense-perception. Imagination and fancy soon begin to use, in a very imperfect way at first, the materials furnished by this power.

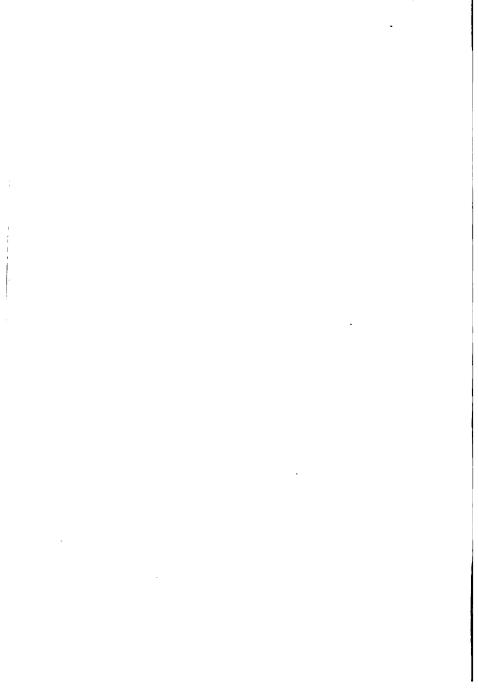
Teacher's Work.—The proper development and training of these representative activities constitute the second great division of the teacher's work.

#### SUMMARY OF CHAPTER V. AND DEFINITIONS.

- 1. Other forms of mental activity observed.
- 2. Recognition of objects by the child.
- 3. Process of recognizing from the name.
- 4. Mental action when listening or reading.
- 5. When reading is intelligible.
- 6. Example of mental action by use of an orange.
- 7. This power, called the representative power, or simple conception.
- 8. Names given to the products of this activity.
- 9. Feelings not reproduced and represented.
- 10. Retention presupposed.
- 11. How retention may be described.
- 12. Real representation defined.
- 13. Real representation furnishes material.
- 14. Another kind of representation described.
- 15. The product, ideal pictures or representations.
- 16. Illustrations, The painter, The novelist.

- 17. Ideal representation, or imagination, defined.
- 18. In what respect imagination is creative, and examples of its power.
- 19. Differences between imagination and fancy.
- 20. Some different forms of the activity of the imagination.
- 21. Its value to the pupil and the teacher.
- 22. The representative activities begin to manifest themselves in early life.
- Representation. The picture or image-making power of the mind.
- Real Representation, or Simple Conception.—The mental activity which forms pictures, images, and notions of individual absent objects of perception, and of other individual things as they are, or are supposed to be.
- Ideal Representation, or Imagination.—The mental activity which forms ideal pictures, notions, etc., within the limits of possibility.
- Fancy or Phantasy.—The mental activity which forms pictures, notions, etc., without regard to law, order, or possibility.





## CHAPTER VI.

#### MEMORY.-LAWS OF ASSOCIATION.

Memory Defined.—'The power of the mind to retain, to reproduce, and to recognize its previous acquisitions, is called memory. It is evident, however, that the processes of reproduction and representation are, in many cases, so intimately connected that no line of separation can be drawn between them.

Retention. — Retention is a fact; so much we know. How it is accomplished is not yet understood. Theories and conjectures here are unprofitable.

Importance of Reproduction.—Reproduction demands especial consideration on account of its great importance in the work of education, as well as its importance in the business and other affairs of life. Acquisitions, however great and varied, are of little service to us unless they can be recalled with readiness and accuracy whenever desired. It concerns us to know how this process of reproduction can be made most easy, immediate, and sure.

Two Supposed Varieties.—We are conscious that in some cases the reproduction seems instantaneous. A question is put to memory, and the answer comes at once. Only a single mental effort has been nec-

essary. In other cases, indeed in most cases, the answer is delayed for a longer or shorter period of time. Several successive efforts have been put forth in order to reach the desired result. The process is apparently a roundabout and complicated one. From this observed difference it has been hastily inferred that the mental processes in the two cases are unlike, and that there is an absolute or independent memory and memory by association of ideas. A closer analysis shows that this inference is erroneous. The process of reproduction is in all cases essentially the same, and depends upon a few general laws of mental activity.

An Observed Fact.—We observe, in a voluntary effort to recall some past acquisition, that one idea, image, thought, fact, or circumstance comes into mind, then another, then still others, and finally, if the effort is successful, the thing desired comes. The ideas, thoughts, events, circumstances, follow each other so regularly and orderly, that we can not escape the conclusion that they are bound together by some potent, though unseen, relations.

Laws of Association.—These relations are named laws, principles, or conditions of association, and are sometimes divided into two classes, called objective and subjective. The objective, also called primary, refer to relations existing between the different thoughts or the different things themselves; the subjective, called also secondary, merely refer to conditions of mind or body which contribute to fix the association of ideas more thoroughly and permanently,

and consequently to facilitate retention and reproduction.

Objective Laws.—In an ultimate analysis, the objective laws may probably be reduced to two,—the law of similarity and the law of contiguity. It will be of service, for purposes of study, to make some further subdivisions.

(1.) Law of Similarity.—This may be stated in two forms: Similar things and thoughts are mutually suggestive, or similar mental activities and states tend to revive each other. This law is familiar, and its value is well understood. It is capable of very wide application in the school-room and elsewhere.

A More Fundamental Law.—The law probably has its source in another underlying and more fundamental law of mind, which is the basis of mental habits also, namely, the tendency of the mind to repeat any activity once exercised, the tendency increasing with the number and frequency of the repetitions. Similar objects excite similar activities, or the same activity. Similar activities or the same activity repeated must give the same, or a similar, mental product.

Illustration.—For illustration, I saw yesterday a specimen of a peculiar kind of flower. To-day another specimen of the same variety is given to me. It causes me to recall the appearance of the one I saw yesterday by exciting a repetition of the former psychical activity, and thus brings about the reproduction of the percept of yesterday.

Examples. - Examples and illustrations of the

workings of this law are very abundant. It acts regardless of place or time, with only the exception which is common to all the laws of association,—that the lapse of a long period of time weakens the power of suggestion. We know that one face often suggests another, though that other may not have been seen for years. One landscape, mountain, valley, lake, river, or tree, frequently calls to mind another, even though thousands of miles intervene between the two. The solution of one mathematical problems suggests the solution of other similar problems. One principle of science recalls other related principles. All comparisons in writing and speaking are based upon this or the next named subordinate law.

External Resemblances. — The resemblance between things is sometimes external, and obvious to one or more of the senses. This is the case with forms, colors, tastes, odors, and many other points of likeness. Cities may resemble each other in location, climate, population, industries, and architecture. States may be similar in population, products, and employments of the people.

Resemblances of Influence.—There are other more subtle resemblances not discoverable by the senses, and still recognized as effective in causing association and suggestion. The resemblance is that of influence or effect, generally connected with emotion or some other feeling. The similarity has been called the "analogy of feeling."

A writer says, "My brethren have dealt deceit-

fully as a brook, and as the streams of brooks they pass away." Friends and summer brooks have no points of resemblance to the eye or ear in their forms of activity. The resemblance was in the feeling of disappointment occasioned by both alike. The brook dried up, and thus cheated the expectations of the tired and thirsty traveler; false friends cheated the heart longing for pity and sympathy. Abundant illustrations of this kind of similarity will occur to those familiar with general literature.

(2.) Law of Contrast.—This is not a distinct law, but merely a special case under the more general law of similarity. This also may take two forms: contrasted things and thoughts are mutually suggestive, or contrasted mental activities and states tend to revive each other. The basis of the law is obvious. The process of seeking and observing likenesses necessarily comprehends the discovery and observation of direct contrasts or opposites. It does not include giving attention to all sorts of differences, but only to those which stand immediately over against the resemblances.

Illustrations.—Sweet suggests sour; the rough suggests the smooth; the beautiful suggests the ugly; the strong suggests the weak. An individual with some marked peculiarity puts us in mind of another person with a peculiarity of just the opposite character. Starving men are said to be tormented or tantalized with mental visions of tables loaded with richest abundance; and freezing men are haunted with recollections of oppressive heat.

Practical Suggestions.—This law indicates that, in many cases, contrasted objects, forms, qualities, and general characteristics, should be brought to the attention of the learner in connection. In geographical and historical studies, also, the principle of contrast does most valuable service.

(3.) Law of Contiguity.—The substance of this law may be stated in various forms: things and thoughts co-existent or immediately successive in time or place are mutually suggestive, or mental activities and states co-existent or immediately successive tend to revive each other.

Underlying Law.—This law evidently has its origin in the broader and more fundamental law of mind, that the presence of any part of a complex thing or thought, previously known, immediately suggests the whole; or the revival of any portion of a complex mental activity or state, previously experienced, tends to revive the whole. This law of contiguity is of very wide application, and embraces a number of related but tolerably distinct cases.

(a.) The relation of time. We associate events because they occurred upon the same day, or within the same week, month, year, or century. Men born at the same time, or living during the same period, are naturally grouped together, and the name of one calls up the names of others; the events and the men of the same age are linked together and are mutually suggestive, especially if the men were actors in the events. Columbus, Ferdinand and Isabella, the discovery of America, and the year 1492

are so united in the minds of students of history that the mention of any one of them recalls all the others. In this and most similar examples, other relations exist, and are operative, beside that of time.

(b.) The relation of place. Places contiguous to each other or to some common object, as the ocean, a large river or lake, a commercial center, or an important line of railroad, are associated in the study of geography and in matters of business. Men are associated with the places where they were born, where they resided, where they performed important and noteworthy acts, and where they died and were buried. Events are associated with the places where they occurred; industries with the localities where they are carried on, and natural productions with the countries which produce them. Associations of place are of the first importance, in connection with geography and history.

The Two United.—The two relations of time and place are frequently united, and the strength of the association is thus largely increased and intensified.

(c.) The relation of cause and effect. The idea of cause has been attributed to intuition as its source. When of two events, one regularly and invariably succeeds the other, either would suggest the other if the relations between them were only that of time. But in such a case, the mind can hardly escape the conclusion that the relation is deeper and more intimate than that of time. The more intimate the connection is believed to be, the stronger

becomes the bond of mental association. The appearance of one event not only suggests the other, but puts the mind to searching for it, if it is not readily discovered. This principle of association is, for this reason, peculiarly valuable and fruitful in results. It finds its most obvious field of activity in the study of the physical and other experimental sciences. The fact of the rise and fall of the mercury in the tube of the thermometer and barometer is naturally and almost unavoidably associated with both the causes and the events likely to follow. Opportunities for this kind of association are almost equally abundant in geography and history.

(d.) The relation of wholes and parts. As already suggested, it is possible that the relation of wholes and parts includes all the cases grouped under the head of contiguity, so far as the activities of the mind are concerned. Practically, however, in the work of learning and teaching, the subdivisions given are found desirable, since the habit of making profitable use of wide generalizations has not yet been formed in young students.

Examples.—The external relation of wholes and parts is proved, in the school and elsewhere, to be very suggestive in matters of association. A single letter suggests the remainder of the word; a single line or angle recalls the whole figure; a single movement of the foot or hand brings back the entire series of complex movements; a note or two repeated enables the singer to recover the whole of a long piece of music; the hesitating pupil repeats the

whole problem, or gives the entire statement, or makes a correct answer, if he can get only the first word. Other illustrations will readily suggest themselves.

Other Relations.—It is true that in some of these examples other relations beside that of whole and parts are involved, and help to render the association effective. The relations between a subject and its predicate, between an object and its qualities, between a container and its contents, and others of similar nature, are so closely akin to that of whole and parts, that they require no separate consideration. A little examination will disclose numerous associations growing out of these relations.

(e.) Relation of sign and thing signified. This relation is of the highest importance in the early education of a child, and deserves more attention than it has usually received. Signs may appropriately be divided into natural and artificial. The natural sign and its signification seem to be almost instinctively associated, and the occurrence of the sign scarcely ever fails to suggest at once its meaning. For practical purposes, it does not matter whether we regard the immediate recognition of this relation by the untaught child and by some animals as the result of original endowment, or of acquired and transmitted habit or tendency.

Natural Signs.—Certain cries of children and of animals always suggest ideas of discomfort and pain. Peculiar movements of the limbs and of the muscles of the face suggest the same ideas. Some other in-

articulate sounds, uttered by children and by some animals, are invariably associated with ideas of comfort, enjoyment, satisfaction, and pleasure. Certain movements of the hands, head, limbs, and other parts of the body appear to have a natural association with certain ideas. The sign is instantly interpreted, and always in the same way by all persons, whether instructed or not. Education, consequently, has very little to do with the association of natural signs and their significations.

Artificial Signs.—On the other hand, the association of artificial signs and their meanings is altogether a matter of education; and the creation of this association, so that it shall be permanent, constitutes a very large portion of the educational work of the young child and his teacher. Written and printed words are entirely artificial signs; spoken words, with possibly a few exceptions, are of the same nature. They are signs of objects, qualities, acts, ideas, and numerous other things, material and immaterial, physical and psychical. In learning to talk, the child, aside from the action of the physical organs of voice and speech, is striving to form a permanent association of certain combinations of articulate sounds with persons, objects, acts, and other things which impress the senses. In learning to read, a double association is formed. Written and printed characters are associated both with the spoken words and also with objects and acts.

Case of the Young Child. — The young child,

both at home and in the school, is more concerned with this relation of signs and their significations than with any other of the laws of reproduction. Much the larger part of the real labor of the first year or two of school life is employed in forming a mental connection so intimate and perfect that the sign shall instantly suggest the right word to express its meaning, and the word, either heard or seen, shall as immediately call up the correct psychical picture, image, or idea. The young pupil can not profitably use a book for the purpose of reading, or studying by himself, until most of the words found in the book have been so associated.

(f.) Mental and bodily conditions affecting reproduction. The force of association and suggestion is only one of two or three important factors concerned in the retention and reproduction of knowledge. This force depends primarily upon the relations just described. Its efficiency, however, is greatly augmented by conditions of mind and body which are, to a considerable extent, under the control of the will, and are, for this reason, called subjective conditions or laws.

Condition of Retention.—In order that a mental impression or product may be surely retained and readily recalled, it must be, to borrow a physical mode of speech, deep and distinct. Its accuracy is important to its value, and should be secured, but this is not a condition absolutely essential to reproduction. The conditions which secure depth and distinctness will, in most cases, also secure accuracy. In a few

obvious cases, depth is gained at the expense of both distinctness and accuracy.

Examples.—A loud, piercing, overwhelming sound makes a deep but very confused impression. An exceedingly brilliant flash of light dazzles the eyes, and leaves an indistinct result. A taste or odor may be so sharp and pungent that the sensory organs are partially paralyzed, and can make no definite report of the impression. Touch may become a blow, and produce a state of complete or partial unconsciousness. Leaving such exceptional cases aside, depth, distinctness, and accuracy can be obtained at the same time by a skillful instructor.

Subjective Conditions.—The following are the most important subjective conditions:

(a.) Attention. The power to retain and reproduce knowledge depends very much upon the kind and degree of attention given in the acquisition. Attention, being in fact merely the concentration of the whole effective energy of the mind in one direction and upon one object, seems to act on the percept, image, idea, or thought, much in the same manner as a concentrated and intensified physical force acts upon a material object. The effect is like that of a heavy blow as compared with the effect of a light one. The impression is made deeper and more permanent. If the attention becomes observation, in the true sense of the word, the impression is distinct; and if the observation is careful and well directed, descending to details and specific characteristics, the impression will be accurate and truthful.

Illustration. — For illustration, my perceptive activity is turned, by some circumstance, to a flower. I notice that it is a flower, and, at first, this is all. But something in the flower attracts my attention, as we usually speak. I observe now that it is a rose. Something peculiar catches and holds my attention still more closely and firmly. I observe now that it is of a rare variety, of a peculiar form and color and fragrance. By this time the impression, the percept, has become deep, distinct, and accurate. To-morrow I can readily recall an image of the rose, and from this image can give a full description of all the peculiarities of the flower.

Attention Selects.—It must be remembered, however, that attention, of necessity, selects some things and neglects or disregards others. In one aspect, it is like the object glass of a microscope, the higher the power, the smaller the field of view. The more intense and concentrated the attention, the fewer are the things observed; the deeper, more distinct and accurate the impression, the more limited its extent.

Attention Determines the Association.—In consequence of this necessary characteristic, attention determines, within certain limits, the associations which shall be made between objects and ideas. Every object or event has its surrounding and related objects and events. Of these, there may be, and in most cases will be, a considerable number and variety. The attention can not be directed at once to all these, and the time for observation may

be too limited to allow them to be taken one by one in turn. Some, therefore, will be passed by entirely unnoticed by one person, while another observer may give his whole attention to them.

What this Fact Explains.—This fact accounts for the unlike, and sometimes contradictory, reports made by different witnesses of the same occurrence. The observers may be equally intelligent, equally truthful, and equally attentive, but the attention of each took its own direction, and made its own selection and its own peculiar associations to guide and determine future reproduction.

Of two persons, objects, or events occurring at the same moment, the attention may be concentrated upon the points of resemblance only, and they will be associated by the relation of similarity as well as of time. They may have strong points of contrast, and these may form the bond of union, all other characteristics going unnoticed. The association may embrace nothing more than the consideration of time and place, if, for any reason, the attention was strongly directed to these.

Of a single object, the only thing remembered may be the position, the size, the form, or the color, the recollection being determined by the direction of the attention.

The importance of attention, in its relation to retention and reproduction, can hardly be over-estimated.

(b.) Repetition. If the impressive force of attenon is compared to the effect of a single vigorous blow, the impressive force of repetition may be compared to the effect of a succession of feeble strokes. Repetition is a natural ally of attention, and, to a considerable extent, a substitute for it during the first years of childhood. All the child's early efforts at learning, from his first attempts to control his hands until he becomes able to walk steadily without assistance, from his first effort to repeat the pet name of his mother until he can pronounce words readily at sight, are made successful only by a continued series of repetitions. The natural order of mental development is such that no substitute can be found for this process; and fortunately the young child does not appear to find it irksome, even in the school, if the teacher is fairly skillful in directing.

Relation of Repetition and Attention. - While, at the beginning, attention determines what objects and ideas shall be associated, and by what relation they shall be united, repetition is required, except in some few peculiar cases, to render the union permanent. If two objects or two persons are seen together once only under very extraordinary circumstances to which the attention is strongly and intently directed, the association may be permanently fixed. Usually, in the first instance, a tendency only to such association begins to be formed, and several repetitions of the observation will be necessary to complete the work, so that hereafter the sight of one of the objects or persons will be sure to cause an image of the other to appear in the mind.

Examples.—The same fact is observable in other and different forms of mental activity. Under the spur of necessity, an actor may commit a new part of considerable length within a few hours by concentrating the whole energy of the mind upon the task. It is simply a supreme effort of attention, and this gives immediate but temporary success. The part will soon be entirely forgotten, unless the work of attention is supplemented by repetition.

Effect of Lapse of Time.—The effect of lapse of time is well known. An impression made yesterday is easily recalled to-day; the reproduction is accomplished with more difficulty to-morrow, with still more difficulty at the end of a week or a month. It is important, therefore, that repetitions begin directly after the first impression has been made, and that, for a time, they be very frequent. When by many iterations the impression has become thoroughly fixed, longer and still longer intervals may be allowed to occur between the repetitions, until they become mere occasional reviews.

The relation of repetition to the formation of habits and the acquisition of skill will require separate consideration and in another place.

(c.) Associated feeling. This topic might, without impropriety, have been treated under the head of contiguity, since the influence of feeling upon reproduction depends upon the tendency of mind to recall and repeat the whole of any previous act or state whenever any part is reproduced.

Mental Acts and States Complex.—Most mental

acts and states, especially in the adult mind, are highly complex. In almost all cases, perhaps in all, acts of knowing are accompanied by states of feeling. The acts and the states become intimately associated, so that a particular act of knowing is habitually and immediately attended by a certain state of feeling.

Illustrations.—This is illustrated by the remark frequently made by individuals, that they can not think of such and such persons or events without becoming angry, or without the feeling of contempt, or pity, or sorrow and sympathy. On the other hand, these feelings, when excited by other causes, have a tendency to recall to mind such persons and events. The relation is evidently similar to that of contiguity, if it is not the same.

Relation Between Thought and Feeling.—The constitution of the soul is such that a natural relationship exists between thought and feeling. Thought produces feeling; feeling, in turn, quickens the activity of thought. They appear to be necessarily co-existent. So far from being mutually exclusive, they are mutually helpful, except when one or the other becomes unnaturally excessive, and when they act in different directions, and are concerned about different objects. In these cases, they are mutually obstructive.

Interest.—Teachers are exhorted to create an interest in the minds of their pupils. This means that they should, if possible, in some way excite certain feelings; for what we call *interest is only* 

feeling of some sort. It may be simple emotion, or it may be some feeling of more definite and specific character.

Two Effects of Feeling.—Feeling seems to exert its influence chiefly in two directions. In the first place, it produces an effect upon the mind which may be compared to that produced upon iron by heat. It renders the soul more impressible, so that the same force produces more effect than it otherwise would. It also intensifies attention, and that increases very largely the energy and effectiveness of the force itself. The attention given to any object or any subject is proportionate to the interest felt, or to the degree of feeling excited. Attention, which is here only another name for the knowing activity, corresponds in degree with the degree of feeling. The result is a more rapid and more permanent acquisition of knowledge, so long as a proper equilibrium is maintained.

Retention Easy.—Acquisitions made under such conditions are ordinarily easily retained and readily reproduced, if due regard is had to the law of repetition. Under the influence of very intense, but not overwhelming feeling, an impression so deep and well defined may be made that no repetition will be necessary. A day, a place, or a scene of very strong and peculiar pleasure or pain, of joy or sorrow, may be vividly recalled, even years afterward, although none of the attending circumstances have ever been revived by repetition or review.

Lasting Associations.—Probably no associations

are more lasting or more constantly active in the work of reproduction than those into which feeling enters as a prominent or predominant element. A little memento, worthless in itself, calls up at once the home of one's childhood, the scenes and circumstances of early life, the forms and faces of those long dead. The interest with which places are visited often has its origin wholly in this association. Reverence and affection for Washington make sacred his home and resting-place, and deeper feelings of the same nature are associated with Nazareth and Bethlehem.

This Principle should be Used.—Advantage should be taken of this principle of association in the instruction of young children. The power of voluntary attention is so weak that it needs to be re-enforced by the energy of appropriate feeling. Anecdotes and short stories about persons, places, inventions, books, articles of furniture, and other objects of study, are of service in exciting and keeping alive such feelings. Care should be taken that only agreeable feelings be associated with processes of learning as far as this is possible. It is no slight misfortune when something good and beautiful in science, art, literature, or life is associated with feelings of pain, disappointment, anger, or some still worse feeling.

(d.) State of body and mind. It is a familiar fact that at some times it is very difficult to fix the mind upon any subject of study, or to reproduce that which has previously been learned. With some

persons, this condition is the natural result of bad mental habits, and indicates no peculiar temporary state either of body or mind. They have never acquired the power to control the activities of the mind, and to concentrate them upon any object or purpose. In respect to attention, they are in the condition of children. The remarks under this head have no reference to such chronic cases of mental imbecility.

Self-control Supposed.—The supposition is that, under ordinary circumstances, individuals have a good degree of control over themselves, and over their psychical activities, and that such a state of inability is exceptional. The condition is real and not imaginary, and, though it may be somewhat modified and relieved by force of will, it can be radically cured only by removing the cause. Efforts to do mental work at such times generally end in melancholy failures.

Causes Obvious.—Sometimes the immediate cause is obvious. The mind may be preoccupied with other objects of thought which can not, for some reason, be dislodged; may be overburdened with cares or anxieties which can not be laid aside at will; may be overwhelmed with some affliction or sorrow, or may be exhausted by too long-continued labors.

Cause may be Bodily.—The cause may be in the derangement of some of the organs or functions of the body. The processes of digestion may be deranged, the nervous system and the brain may be exhausted; some nerve may be tormented by acute

pain, or general lassitude and weariness may affect the whole physical organism.

Causes in the School.—In the school-room the immediate cause of this partial and temporary imbecility may frequently be discovered in the discomfort arising from constrained and unnatural positions, from a temperature too high or too low, from vitiated air, or from undue and unnecessary nervous irritation.

Under such conditions of body and mind, very little healthy and vigorous psychical activity can take place. The feebleness of attention prevents the production of deep and well-defined mental impressions, or the formation of effective association of ideas; and associations previously formed seem to lose their suggestive power.

Original Differences.—Differences or varieties of memory. Under the head of subjective conditions affecting retention and reproduction, peculiarities and differences of mental constitution are sometimes reckoned. These are so radical, so permanent, and so slightly affected by efforts of the will or by temporary surrounding circumstances or immediate states of body or mind, that they constitute, in effect, original varieties of memory itself.

Differences in General Power.—In some cases the differences are merely variations of degree in the general power or activity of memory. Some persons are able to retain and reproduce acquisitions of all kinds, relating to all subjects, much more surely and readily than others. In some cases a like difference

is observable in all the other psychical activities; in other cases, the difference seems confined to the memory and its associated powers.

Special Differences.—More commonly, however, the difference is not one of general but of special power. Some things and some classes of things are remembered and recalled without difficulty, perhaps with unusual facility, while other things and classes of things can be retained and reproduced only with extreme difficulty, or there may be, apparently, an entire inability to recall them. Such general and special original differences manifest themselves in childhood, and should be considered in the demands made upon pupils in all departments, but especially in the primary grades.

Acquired Differences.—No causes can be assigned for original disparities of memory, or of other psychical activities, except natural or inherited peculiarities of mental constitution. Reasons can usually be discovered for differences appearing in mature life, or after the period of childhood. If the disparity is general, it probably results from good or bad training in the home and school, from proper or improper use of memory, from fortunate or unfortunate personal habits of study and reading, or from a combination of circumstances.

Causes of Specific Differences.—If the differences are specific, their causes are found in employments, professions, peculiar environments, the attention given to special studies, and other manifest conditions. Mental activity has been concentrated upon

particular objects or subjects; other things have been partially or wholly neglected; the mind has been constantly filled with one class of impressions until it has become peculiarly susceptible to these, and comparatively unable to be affected by those of a different character. The mental activities of perception, representation, and reproduction having been exercised so exclusively in one direction, peculiar associations of objects and ideas have been formed, and permanent mental habits have been created.

Illustrations will readily occur of the influence of circumstances and occupations. The physician observes and remembers one class of things; the lawyer, the clergyman, the teacher, the journalist, the scientist, naturally notice and habitually recall other classes of things. The same is true of men engaged in all the various departments of professional, business, and mechanical activities. These, and all other similar variations in the power and direction of memory, are results of the influence of the general law of habit.

Directing Power of the 'Will.—Passive reproduction - Reverie. In ordinary cases of reproduction and representation, there is a conscious directing effort of the will. A desire is felt to make some particular mental picture or image, to recall some particular past acquisition, to reproduce material for immediate and special use, and the reproductive and representative energies are exercised according to this desire.

Association Limits Reproduction. — It is true that previously formed associations will limit the total amount of matter which can be recalled, but, in most cases, it is only a small part of that which relates to any subject which is wanted at any one time or for any one purpose. Every object or idea is associated with a large number of other objects and ideas, any one of which may be brought into mental view when the reproductive process begins. Some of these associated objects and ideas are germane to the subject under consideration, others are not. The irrelevant ones are instantly rejected; the relevant ones seized upon and appropriated. In this way direction is given to the reproductive activity. and a selection is made of the train of ideas and thoughts which the mind will follow, or will allow to remain in consciousness. Practically, therefore, both memory and imagination are obedient to the will so far as the will chooses to exercise its prerogative. If it were otherwise, acquisitions of knowledge would be comparatively useless, since their recovery at any particular time would be almost a matter of chance.

Undirected Reproduction and Representation.—At times the reproductive and representative processes go on without interference or control by the will. The mind exerts no positive, voluntary activity. Some passing object or event "starts a train" of images or ideas, and the mind remains passive as they come and go, being merely conscious of their presence, and allowing them to crowd and

jostle each other as they please. The result is apparent chaos, and the temporary combinations of images and ideas are generally incongruous, and often amusing from their very strangeness and absurdity. If the senses of a person in this condition remain subject to external impressions, these impressions mingle with the reproduced images, and probably give some direction to the confused current flowing through the mind.

Reverie. — If the senses are closed or inactive, the current is unimpeded by external influences, and takes, what seems to the observer, a random direction. This state of mind has been called reverie; it has some characteristics in common with the state called abstraction. The most marked difference between reverie and abstraction is, that in the former state there is no continuity in the mental imagery, no apparent connection between successive mental pictures, while in the state of abstraction the mind is so completely possessed and occupied by some one subject that it is absolutely oblivious to every thing else, and especially to sense impressions. This automatic action of mind in reverie is properly classed with the reproductive and representative activities, since it has so many characteristics in common with them. By some it is regarded as a mode of imaginative activity. It might more appropriately be called passive fancy or phantasy.

Effect of Reverie.—Individuals of certain temperaments easily fall into this dreamy state of mind, particularly during the time when youth is changing

to maturity. The state may even become habitual; in which case irreparable injury is inflicted upon the mind. It makes all continued and vigorous mental action distasteful, if not impossible. It weakens the power of attention, destroys the energy of the will, and, in fact, undermines the whole psychical fabric. The representative activity which is excited by reading some classes of books does not differ much from this unwholesome mental condition. The effect upon psychical vigor is exceedingly harmful.

## SUMMARY OF CHAPTER VI. AND DEFINITIONS.

- 1. Memory defined.
- 2. Retention.
- 3. Importance of reproduction.
- 4. Two supposed varieties of reproduction, not really two.
- 5. Observed fact of associated ideas.
- 6. What laws of association are.
- 7. Primary or objective laws.
- 8. Law of similarity. The underlying fundamental law.
- $9. \ \, \text{Illustrations} \, \, \text{and} \, \, \text{examples}.$
- 10. External resemblances obvious to the senses.
- 11. Resemblance of influence or effect.
- 12. An illustration.
- 13. Law of contrast.
- 14. Illustrations. Practical suggestions.
- 15. Law of contiguity.
- 16. The underlying principle.
- 17. Various applications of this law.—(a.) Relation of time; (b.) of place; both these often united; (c.) of cause and effect; (d.) of whole and parts, and various others; (e.) of sign and thing signified; natural signs and artificial signs; work of the young child; (f.) of mental and bodily condition.
- 18. Conditions of retention.

- 19. Depth and distinctness of impressions.
- 20. Examples of strong impressions.
- 21. Subjective conditions, secondary laws.—(a.) Attention, examples, and illustrations, attention determines association. (b.) Repetition; relation to attention; examples; effect of lapse of time. (c.) Associated feeling; mental states complex; illustrations; relation between thought and feeling; interest; two effects of feeling; retention easy; lasting associations; this principle should be employed. (d.) State of body and mind; causes frequently obvious; condition in a school.
- 22. Varieties or differences of memory.
- 23. Differences in general power.
- 24. Specific differences.
- 25. Acquired differences.
- 26. Causes of specific differences.
- 27. Passive reproduction, Reverie.
- 28. Usual directing power of the will.
- 29. Association limits reproduction.
- 30. Undirected reproduction and representation.
- 31. Reverie. Bad effects of this state of mind.
- **Memory.**—The power of the mind to retain, reproduce, and reknow its acquisitions.
- Attention.—The concentration of mental energy and activity upon any one object, either external or internal.
- Laws of Association.—The relations and conditions which cause objects, events, thoughts, ideas, etc., to be mentally associated or bound together.
- Primary or Objective Laws.—The relations which exist between associated objects, events, thoughts, ideas, etc.. and which cause them to be mutually suggestive.
- Secondary or Subjective Laws.—The conditions and states of mind and body which contribute to render the association of objects, events, thoughts, ideas, etc., more certain and more lasting.

- Fundamental Law of Reproduction.—The mind has a natural tendency to repeat any form of activity which it has once exercised, and the strength of this tendency increases with the number and frequency of the repetitions.
- A Fundamental Law of Suggestion.—The presence of any part of a complex thing or thought, previously known, usually suggests the whole; or the revival of any portion of a complex mental activity or state, previously experienced, tends to revive the whole.

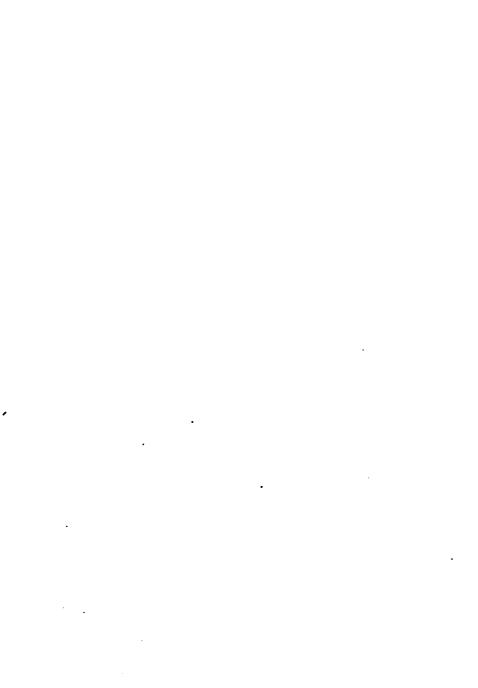
## SUMMARY OF SECOND GROUP OF MENTAL ACTIVITIES.

Representative and Reproductive powers.

1. Real representation or simple conception.

2. Ideal representation or imagination.

3. Memory.



1

1

1

with out doubt, the fire logica. This activity is conjection. The mind state: a susation of s is experienced. Sensiti ent sensitions are expe which and through the to as of color, sound, to titlets of the same senschots are inmediate are examined, compared or unlike, similar or di The p~millances and c whicheren are very and fally distinguished nearly fixed in memor repeated is recognized \* XI\* reneed. The child mation, comparison, and are undoubtedly very fe such activities commenc

Illustration. — The |p|may be readily illustrate of a child. The nerve and the feeling of irrita nerve. A sensation is e. prok is repeated with a sation is felt. The sens two, and the second is d There is a consciousnes p-sulting from comparise

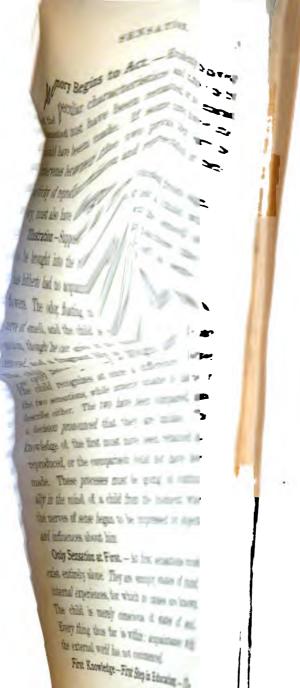
Salar Sa . च अध्यानुष्याते ते - \_ \_ oun 1 m eign イン たんだくび 紙

The freeze C - word in · \_ POSTER · Propiet Company - : **32**: proj 35 ٠ ٣. ٤

FOR FRENCH KITTIES.

. Tribi 7 sink :: 17.1 

. . .



• . •

## CHAPTER VII.

## THE ELABORATIVE OR THINKING ACTIVITIES.

Thinking.—The term "thinking" is employed, in common speech, to denote any form of mental action. The word properly indicates, however, only those forms of psychical activity by which the materials of knowledge, gathered up by perception and held ready for use by memory, are examined, compared, classified, and transformed into the condition of real knowledge. That which was at first little else than a crude mass, becomes an orderly collection of valuable matter.

Illustration.—A crude illustration of the thinking processes may be borrowed from the processes which go on in the conversion of the material received by the digestive organs into a nutritive form. Materials to be used for nourishing and building up the physical organism, are gathered from all directions and all sources, and, after the preliminary operation of mastication, are deposited in the stomach. These materials are not so much food as they are the substances out of which food is to be manufactured. By the processes of digestion, circulation, and assimilation they are transformed into real nourishment, and converted into blood, bone, muscle, and

nerve. Thinking does for the products of the acquisitive mental powers what these processes do for the raw materials of food. It mentally digests, transforms, and assimilates them. It converts them into forms in which they may be said to be comprehended, or thoroughly known. The other activities merely apprehend them; that is, seize upon and hold them.

Children's Thinking.—The thinking activities commence in children's minds at a very early period, as soon, evidently, as materials are furnished; but the first efforts are exceedingly feeble, scarcely more than faint inceptions. That they are real beginnings of the highest and most complex of all psychical activities, is abundantly proved by the questionings of childhood. The ripe development of the thinking powers is attained only with the full maturity of both body and mind.

General Notions, or Concepts.—Conception. The preliminary processes of thinking require the formation of general notions, or concepts proper, and of those mental products called abstract ideas. These general notions are named by such terms as animal, man, horse, flower, fruit, rose, and others of similar nature, designated usually as common nouns. Abstract ideas are named by such words as virtue, vice, goodness, purity, honesty, and similar terms, commonly called abstract nouns. General concepts and abstract ideas, although of somewhat similar origin, and frequently associated together, differ widely in some important features. These differences will be-

come evident when the origin and peculiar characteristics of both have been examined. The origin of such notions and ideas, and the use of the terms by which they are named, will be best understood through illustrative examples.

Formation of General Concepts.—I have before me a large number of apples. They differ somewhat in form, vary much in size, color, and taste. I examine them one by one with great care, noting the qualities and characteristics of each. At the conclusion of the examination, I discover that some qualities and characteristics have been noted in connection with every apple. These are common characteristics. Each apple, or each variety of apples, has also qualities and characteristics peculiar to itself, and not found in any of the others.

Analysis. — This process of examination is properly enough called analysis. By reviewing this work of analysis, I observe that I have been able to select any one quality of an apple, separate it for purposes of examination from all other qualities, and devote my whole attention to that alone. I observe further, that I have been able to select any one of the characteristics common to all the apples, devote attention to it, and think of it not as belonging to any particular apple, but to all apples. I find I have been able thus to separate all the common characteristics.

Abstraction. — This process of selection and separation is termed abstraction. It will be noticed that, in this case, abstraction is nothing more than concentrating the attention upon some particular

things and entirely disregarding, for the time, all other things.

The Concept. — I discover now that I can take all the common characteristics, and combine them, or suppose them combined, in a single apple. The result is an apple containing all the common qualities and features, and no others. It is neither sweet nor sour; neither red nor green; neither hard nor mellow; neither early nor late in ripening. No such apple actually exists, or ever did exist, or ever will exist. It is purely a mental product. It is the general notion, or concept, to which the common name apple is applied. This name I now extend, and make it embrace and designate all varieties of fruits which possess the few common characteristics.

Generalization. — This application of a common name to a large number of individuals, because they all have certain things in common, is termed generalization. In a similar way are formed the general notions, or concepts, called tree, fruit, flower, lily, animal, horse, man, house, table, chair, and all others to which common names are applied.

Conception. — The whole mental activity by which this complex process, including analysis, abstraction, and generalization is performed, receives the name conception. The mental products, as already stated, are general concepts or notions.

Difference between Individual and General Concepts.—The difference between the use of the terms conception and concept here, and a previous use, will be readily observed. Simple concepts represent in-

dividual things; general concepts represent classes or large numbers of individuals. Having once carefully observed a particular pear-tree, I can form a simple concept or image of that individual pear-tree. By the processes of analysis and abstraction, after observing many such trees, I am able to form a general concept or notion representing the whole class of pear-trees.

Relation between the Two.—In many cases, a natural and interesting relationship can be discovered between the two kinds of concepts. A dim and shadowy picture, or mental image, can be formed of many general concepts; but if a strong effort is made to render this confused image distinct and clear, with well-defined outlines, it becomes transformed into a simple concept of some individual of the class which it represents.

Classification.—The processes above described, and included under the name conception, are essentially the processes involved in the work of classification as performed by the student of botany and other similar studies. The general concept constitutes the basis of the class in all cases; and the ordinary scholar finds this basis already provided and ready for use. The common qualities, or characteristics, have been abstracted, combined, and given to him in the form of a definition. The classes have been made, named, and described. The student has only two processes to perform instead of three. The most difficult part of the work has been done by the original investigators, and it would be worse

than folly to insist that every student must do this over again for himself. The learner, in botany, for instance, must make the analysis and the generalization; that is, he must examine each individual specimen presented to him, and place it in the proper class. In other words, he must examine a flower sufficiently to be able to name it correctly. Naming consists in stating the class, order or family, genus, species, and, in some cases, variety.

Nature of a Definition.—A definition has been given to the student in his text-book of each of the divisions just mentioned. This definition is nothing more than a brief statement or enumeration of the contents of a general concept. If the concept is very complex, and contains a large number of elements, the definition must be very long, or the less important elements must be omitted. A definition, for some purposes, consists in giving the name of the class, or genus, to which an object belongs, with a brief statement of its specific characteristics. For example, a rectangle is defined as "a four-sided figure, having only right angles." "Four-sided" names the genus or class of figures to which the rectangle belongs; "having only right angles," states how it differs from other four-sided figures, or names its species among the great variety of figures with four sides.

Descriptions.—It is a matter of interest to discover that our familiar descriptions of objects frequently take the form of classification. A basket is brought to me, and I am asked to describe the con-

tents. I say the basket contains fruit. This statement, if correct, puts the contents into the great class fruits, and separates them from all other products of the earth. I say, further, that they are grapes. This puts them into a genus, or particular kind of fruit, and distinguishes them from all other fruits. I add still further that they are Catawba grapes. This completes the description, and really completes the classification, by placing them in a species or variety of grapes, thus separating them from every other kind or variety. It is presupposed that the meanings of the terms fruit, grapes, Catawba, are fully understood; which is a familiar way of saying that the contents of the mental notions or concepts associated with these words, and called up by them, are instantly recognized and identified.

Examples.—The descriptions by which absent objects are to be named in a game of guessing, are often tolerably correct scientific definitions. Any one at all familiar with natural history, would at once recognize as a gray squirrel an animal described as, "A small rodent of gray color, with a bushy tail, whose movements are very active and graceful." Here the class and order are given with certain family characteristics sufficient to enable a person, acquainted with the technical terms used, to identify the object with little danger of mistake.

Abstract Ideas.—The notions indicated by such terms as virtue, vice, goodness, beauty, loveliness, and others of the same kind, as stated above, are

called abstract ideas. They do not, like general concepts, denote a collection and combination of qualities, elements, or characteristics, common to a large number of individual objects, but rather a single intangible and indefinable quality or element, regarded as the essential and predominating characteristic of a large number of material objects, or of many different acts and states of sentient beings. By the process of abstraction this single element is mentally separated from the various objects, acts, and states in which it is supposed to be found, and is designated by a name usually derived from an adjective descriptive of the objects, acts, or states.

Examples of Abstract Ideas.—Examples are abundant. From a number of objects called hard, we obtain, in this way, the abstract idea named hardness. From many objects regarded as beautiful, the idea of beauty is derived. From tough objects, toughness; from brittle objects, brittleness, and so on indefinitely.

From acts and states of sentient beings, called virtuous, we get the abstract idea of virtue; from benevolent acts, benevolence; from kind acts, kindness; from vicious acts and states, vice; from malicious acts, malice; and from selfish acts, selfishness. Illustrations might be multiplied to any extent.

Difference between General Concepts and Abstract Ideas.—It was stated that, in many cases, general concepts might be dimly imaged in the mind; abstract ideas can not be imaged in any degree, nor under any conditions. They are mere psychical crea-

tions of the thinking powers, and have no characteristics by which they can be described or directly made known to the senses. Consequently, ideas expressed by abstract terms can be learned only through concrete examples of objects, acts, and states, in which such ideas are embodied, and to which they give character. The idea of hardness can be comprehended only by becoming acquainted with hard objects through the senses; the idea of goodness, only by knowing immediately good beings, good actions, and good things of various sorts.

Use of Terms by Children.—Children come to a full comprehension of abstract ideas very slowly, and not until the thinking activities are well developed. They form general concepts earlier, but at first, without doubt, very imperfectly. The fact that they use general terms does not prove the possession of general notions. Such terms are employed by them as names of individuals, and not of classes of things. The name man, when pronounced by a young child, means some particular individual; boy includes only a single person; dog indicates but one animal of the dog kind. This is at first true of all common nouns. Very slowly, and probably by an unconscious process, the child begins to form general concepts. For a long time such notions embrace but few elements, and differ only slightly from sense concepts.

Judgment.—One important form of psychical activity has frequently and necessarily been alluded to, but has not yet been carefully examined and

fully analyzed. It is the activity which compares and judges. It places objects and ideas, literally or figuratively, along side each other, and discovers their agreements and differences and relations, and makes decisions in respect to these. Two objects of sight may thus be compared in respect to form, size, color, and all other characteristics discoverable by the senses. The resulting decisions may be that the objects agree in form, differ in color, are of equal size, but of different material.

Common Experience.—In the ordinary affairs of life, we are more familiar with this mode of mental activity than with almost any other. We are constantly comparing things, discovering resemblances and differences, coming to conclusions, making decisions, affirmations, and denials. All our real thinking takes essentially this form. Even in questioning, little else is done except to inquire what can be affirmed or denied in respect to some object of observation or thought.

The Judgment — A Judgment. — The mental power by which these processes of comparing and deciding are carried on, is called judgment, or the judgment. The psychical product is named a judgment. When expressed in words, this product is called a proposition. Every proposition must contain two parts or elements, —a subject, the name of that concerning which the affirmation is made, and the predicate, the words making the affirmation.

Two Ideas. — Every judgment embraces two ideas, mental products of some sort. One of these is rep-

resented or expressed by the subject of the proposition, the other by the predicate. In the simple proposition, "Iron is hard," we have, first, a concept of a substance called "iron," and, second, an idea of a quality named hardness, expressed concretely by the adjective "hard." In the proposition, "The man is guilty," there is a concept represented by the word "man," and an idea of a state or condition called guilt, attached here to man by the adjective "guilty."

Affirmative Judgments.—In both these cases the judgments are affirmative, and the propositions are consequently affirmative. The assertion, in each case, is that the two ideas are consonant and may be united. The quality hardness properly belongs to iron; the state of guilt is rightly fastened upon the man. In the proposition, the copula "is" expresses the union.

Negative Judgments.—In the sentences, "Iron is not soft," and, "The man is not guilty," we have negative propositions, expressing negative judgments. The decision of the judgment, in each case, is that the two ideas are not compatible and can not be united. Softness can not be predicated of iron, nor guilt of the man. The negation is expressed by the little word "not."

Belief.—In the formation of both affirmative and negative judgments, there is an accompanying state of mind called belief.

**Doubting.**—The propositions, "Is iron malleable?" "Is the man guilty?" are interrogative. They indi-

cate that the judgment is in a state of suspense, and the mind in a condition of doubt. The data given are not sufficient to enable the judgment to reach a satisfactory conclusion. The state of suspense must continue until additional material for examination and comparison shall be obtained from some source. It is not the office of judgment to create or collect the matter upon which its activities are exercised. It examines, compares, sorts over, and arranges the acquisitions of the perceptive and representative powers. In this respect, it bears some resemblance to imagination.

Singular and Universal Judgments.—Judgments are divided, for certain purposes, into singular and universal. Singular judgments are those made about individuals or single things, as, "This boy is industrious"; "This horse is valuable"; "This book is mine." Universal judgments are those relating to classes, as, "Honest men are respected"; "Birds are animals"; "Books are useful."

Predicates Include more than Subjects.—It will be noticed that the predicates of the singular judgments, in these examples, denote classes of objects to which the subjects belong; and that the predicates of the universal judgments also indicate classes larger than those denoted by the subjects, and include the classes named by the subjects.

Resemblances and Differences between Concepts and Judgments.—The points of resemblance and difference between conception and judgment, and between a general concept and a judgment, can now

be clearly seen. Both conception and judgment form combined and complex mental products, but the combinations are unlike.

A Concept a Single Notion.—Conception unites a number, greater or less, of qualities or elements common to many individuals, and produces a single complex mental representative of all these individuals taken as a class. It is one complex notion standing apart from all other notions. In the formation of this concept, judgment has been constantly active, and has borne a large part. It has, in all cases, compared the qualities and characteristics of the different individuals, decided as to their resemblances and differences, and determined what elements could enter into the final product. Conception has been guided by judgment in the whole work.

Two Notions in a Judgment.—On the other hand, judgment, in its own peculiar activity, deals, in every case, with two distinct objects, ideas, or representations. These objects and ideas may themselves be simple or complex, may be material things, percepts, sense-concepts, or general concepts. Judgment does not create them; it uses them as it finds them. Taking two such objects or representations, it ascertains by comparison what relation exists between them, and decides accordingly. If the relation allows, it unites them; but in such manner that, after the union, each still remains a distinct object of perception or of thought. The combination bears no resemblance to that found in the general concept, in which the elements are inseparably united as in

a chemical compound. It will be observed in all the examples given of judgments that the ideas expressed by the subjects and predicates are merely united by a copula, and not blended together. Concepts are expressed by single words; judgments, by complete sentences.

#### SUMMARY OF CHAPTER VII.

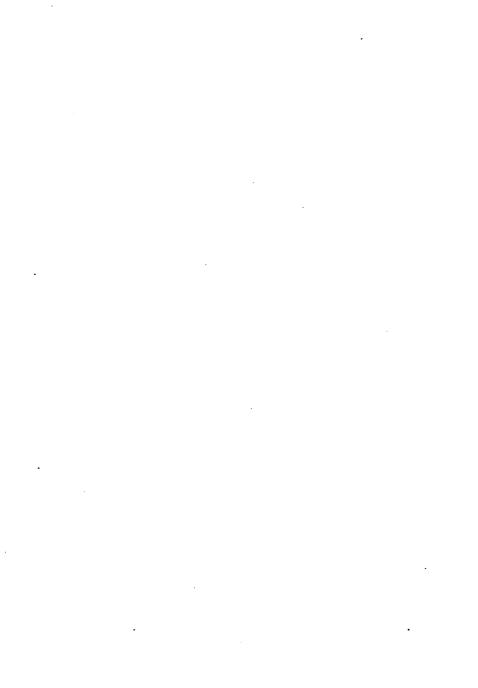
- 1. Meaning of the term "thinking."
- 2. Illustration from the physical organism.
- 3. The thinking of young children.
- 4. Preliminary processes of thinking require the formation of general concepts.
- 5. Illustration of the formation of general concepts.
- 6. First step-Analysis.
- 7. Second step Abstraction.
- 8. Third step Generalization.
- 9. Each of these explained and illustrated.
- 10. Nature of a general concept.
- 11. Conception defined.
- Difference between general concepts and sense-concepts, or images.
- 13. The relation between the two kinds.
- 14. The process of classification.
- 15. Nature of a definition.
- 16. What a description is.
- 17. A familiar illustration.
- 18. Nature of abstract ideas; how they differ from general concepts.
- 19. Use of general terms by children.
- 20. Office of the activity called judgment.
- 21. Experiences in common life.
- 22. Judgment defined; A judgment defined.
- 23. Two ideas or notions in a judgment.
- 24. Affirmative and negative judgments.
- 25. Belief; doubting.
- 26. Singular and universal judgments.

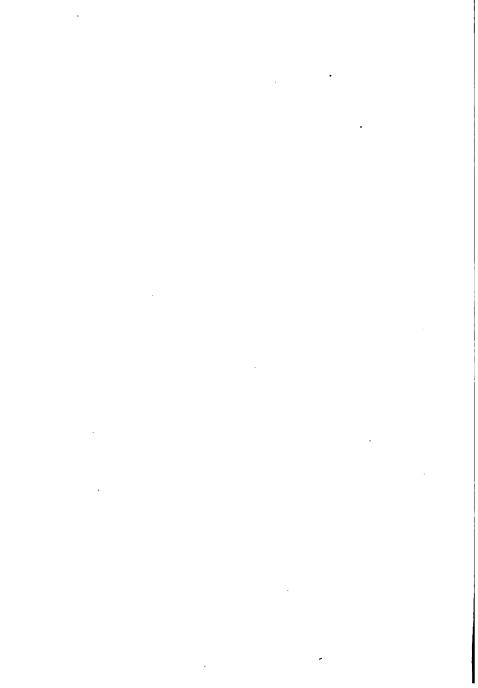
- 27. Predicate includes more than the subject.
- 28. Resemblances and differences between concepts and judgments.
- 29. Use of the copula in judgments.

#### DEFINITIONS.

- Conception. The mental activity which forms general notions, or notions of classes. It involves analysis, abstraction, and generalization.
- Analysis. The process of decomposing or separating any thing compound or complex, or heterogeneous in any respect, into its parts and elements.
- Abstraction.—The process by which one part, element, quality, or attribute, of any thing compound or complex is taken away from the other parts, elements, qualities, or attributes, and made an object of special consideration.
- Generalization.—The application of a single general name to many objects, all of which possess certain common characteristics; or grouping together under one general name many objects, all of which have certain common characteristics.
- A General Concept.—A mental product of the conceptive activity, or the mental notion of a class of objects; such a notion as is indicated when any common noun is used.
- The Judgment.—The mental activity which compares objects of observation or of thought, and decides as to their resemblances and differences, their agreements and disagreements, etc.
- **A Judgment.**—The mental product of an act of the judgment.
- **▲ Proposition.** A judgment expressed in words.
- Subject of a Proposition.—The name of that of which something is affirmed or denied.
- Predicate of a Proposition.—The words used to affirm or deny something in respect to the subject.

- **Affirmative Judgments.**—Judgments by which something is affirmed or asserted.
- **Negative Judgments.**—Judgments by which something is denied.
- Singular Judgments.—Judgments in which the subject is the name of an individual object or thing.
- Universal Judgments Judgments in which the subject is the name of a class of objects or things.





#### CHAPTER VIII.

## ELABORATIVE OR THINKING ACTIVITIES. (Continued.)

Immediate and Intuitive Judgments.—Reason and Reasoning. The individual judgments considered in the last chapter had no necessary relation to each other. They were obtained by direct and immediate comparison of objects and ideas, and were pronounced true in consequence of the discoveries made during the examination and comparison, without explicit reference to other judgments. These may be called, properly, immediate judgments. All intuitive truths are intuitive judgments. The characteristics of such truths or judgments have already been learned. Immediate and intuitive judgments are the basis of all other judgments, and, consequently, the basis of all reasoning.

Other Judgments.—A little observation of our own mental processes will make it evident that only a few of our judgments are immediate or intuitive. In most cases, they have a direct or an implied reference to each other, and are discovered to have a necessary relationship. Some are found to depend upon others as their causes or conditions. The judgment affirms one thing because another has been previously affirmed and accepted as true. It denies one

thing because another has been denied, and the denial accepted as beyond question. In such cases, judgments or propositions are compared instead of individual concepts and ideas. This process of comparing judgments is called reasoning. It is only a special and peculiar form of the activity of judgment. The peculiarity consists chiefly, if not entirely, in the matter compared. Illustrations will show that the process, in an abbreviated form, is very familiar.

Examples of Reasoning.—A person says, "We shall have cooler weather, because the wind has changed to the North." This statement includes two judgments; one of them, "The wind has changed to the North," is a fact of observation; the other, "We shall have cooler weather," is an inference or conclusion, apparently based upon the fact stated. Really, however, it is based upon a third judgment tacitly understood, namely, "The weather is usually cooler when the wind changes to the North." The conclusion is, in this case, only a probability.

Full Form of the Reasoning.—Written in full, this process of reasoning gives a regular series of judgments. (1.) When the wind changes to the North we usually have cooler weather.

- (2.) The wind has now changed to the North.
- (3.) Therefore, the weather will probably be cooler.

Other Examples.—The dealer in produce affirms that "The price of wheat will be higher, because

the crop promises to be below the average." This may be expressed in complete form with three judgments, like the preceding example.

The teacher declares, "This boy will never become a good scholar on account of persistent idleness."

Stating all that is understood by this affirmation, we have:

- (1.) Persistently idle boys never become good scholars.
  - (2.) This boy is persistently idle.
- (3.) Therefore, he will never become a good scholar.

Implicit and Explicit Reasoning.—These examples are sufficient to show that we are constantly reasoning, in every-day affairs, by a series of expressed or implied judgments. When the grounds for the conclusion are not fully stated, but are assumed as understood and admitted, the reasoning is called implicit. When the judgments are all formally expressed, the reasoning is termed explicit.

Induction.—The mind has a natural tendency to pass from a number of particular judgments to a more general judgment, which expresses a law or principle embracing not only the cases named in the particular judgments given, but all similar cases. It is a mental operation, in which we infer that what is true in the few cases which we examine, is also true of all cases that agree with these in the respects or characteristics under especial consideration.

Illustrations.—We observe that all the material

things with which we are acquainted fall to the ground when not supported. We have never discovered a real exception to this rule. We infer that all material things, in all places upon the earth, will do the same.

We observe that all perfect apples examined by us have five seed cells; we infer that all perfect apples every-where will have the same number.

We notice that dogs, cats, and all animals falling under our observation having a certain particular kind of teeth, eat flesh. We conclude that all animals with similar teeth will eat flesh.

Hasty Generalizations.—Examples might be multiplied to any extent. The process is a species of generalization, into which children fall at a very early period. The tendency, both among children and older people, is to make too hasty generalizations. The individual facts observed are not numerous enough to justify the inferring of a general law. Among such hasty inductions are the statements that, "All men are liars," that, "Every man has his price," and other similar careless affirmations.

Induction Defined.—Such reasoning is named induction, and may be defined as the process of arriving at a general rule, law, or principle from examining a sufficient number of individual cases. It consists essentially in concluding that whatever can be truly said of a considerable number of individuals, may also be said of the whole class to which these individuals belong.

Deduction.—Having reached general or universal

laws and truths by personal inductions, or by instruction, we naturally apply these to individual cases. This tendency of mind is as observable as the tendency to form general laws.

Illustrations. — We say, (1.) All men are fallible.

- (2.) John Smith is a man, that is, one of the "all men."
  - (3.) Consequently, John Smith is fallible, or:
  - (1.) Honest men are trustworthy.
  - (2.) This man is honest, that is, an honest man.
  - (3.) Therefore, this man is trustworthy.

Three Judgments or Propositions.—In these, and in all similar examples, we have three judgments or propositions. The first two are called premises, and the third is called the conclusion. Such a combination of judgments is named a syllogism:

Analysis of the Judgments.—In analyzing the judgments in one of these syllogisms, it will be observed that the first makes an affirmation in respect to a whole class of objects or persons. The second asserts that a particular individual belongs to this class. The third, the conclusion, declares that what has been affirmed of the class may be also affirmed of the individual, because he is included in the class. This is the simplest form of the syllogism, of which works upon logic give a great variety of forms. The same general law, however, pervades them all.

Premises and Terms.—Of the two premises, the first, which makes an affirmation of the class, is termed the *major* premise; the second, which merely

asserts that the individual belongs to the class, is called the *minor* premise. In logic, the subject and predicate of the judgments in a syllogism are named terms. Every judgment, consequently, has two terms, but an examination will show that the three judgments of any correct syllogism contain in all only three terms, these being repeated in the different propositions. One term is called the major, one the minor, and the other the middle term. The major term will be found in the predicate of the conclusion, and the minor term in the subject of the conclusion. The middle term is the one not found in the conclusion.

Examples.—In the second syllogism given above, "trustworthy" is the major term, and names the largest class of persons spoken of in the syllogism; "this man" is the minor term, denoting an individual. The middle term is "honest men," indicating a class which embraces "this man," and is itself included in the greater class of the "trustworthy."

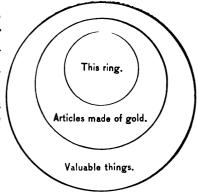
Basis of Deductive Reasoning.—Deductive reasoning rests upon the belief that, "whatever can be affirmed of an entire class can be affirmed of every individual of that class."

Illustrations by Diagrams.—The nature of the syllogism may be conveniently illustrated to the eye by means of a diagram composed of circles. Take the syllogism:

- (1.) All articles made of gold are valuable.
- (2.) This ring is made of gold.
- (3.) This ring is, consequently, valuable.

The first proposition, the major premise, affirms that all articles made of gold belong in the greater class of valuable things. The second proposition, the minor premise, places this ring in the class of articles made of gold.

The largest circle, representing the major term, includes all valuable things. The second circle, representing the middle term, embraces all articles made of gold, and consequently, by assumption, falls within the larger circle. The small circle, rep-

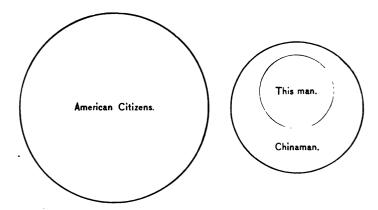


resenting the minor term, this ring, is within the middle circle, and must, therefore, of necessity, be within the larger one.

Negative Major Premise.—The major premise may be negative. The necessary result in such a case can be easily represented by a similar diagram. Take this example:

- (1.) Chinamen can not be American citizens.
- (2.) This man is a Chinaman.
- (3.) This man, therefore, can not be an American citizen.

By the conditions assumed, the middle term, Chinaman, represented by the second circle, is entirely outside the larger circle, representing the major term, American citizens. Consequently, the small circle, representing the minor term, this man, being within the middle circle, must be outside the



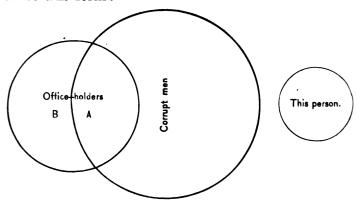
large circle, and this man can not be among American citizens.

Fallacies.—A fallacy is an argument which, on its face, appears valid, while, in reality, it is not valid. If such an argument is employed with an intention to deceive, it is called a sophism. One very common form of fallacy is illustrated by the following syllogism and the attached diagram:

- (1.) Office-holders are corrupt.
- (2.) This person is an office-holder.
- (3.) This person is, consequently, corrupt.

The fallacy here is perpetrated by employing a middle term, office-holders, which does not necessarily include every individual of the class which it names. It is tacitly assumed that all office-holders are corrupt, which is not true. The middle term must embrace, in at least one of the premises, the whole

class which it designates. This, in logic, is called the distribution of the middle term, and this kind of sophism is named "the fallacy of the undistributed middle." The diagram representing such a fallacy takes this form:



Only a part of the circle representing the middle term, office-holders, falls within the large circle, which represents the major term, corrupt men. It is, consequently, impossible to determine whether the small circle, representing this man, should be placed within the large circle at A, or outside that circle at B.

A very common form of fallacy consists in using ambiguous words, or words which, in the course of a long period of time, have lost their original meaning and have acquired a very different one. The term pagan originally denoted a villager, or a person living in some small country place. At present it is usually employed to designate a disbeliever in Christianity. By confusing the two meanings in a syllo-

gism one may readily prove that all country-people are pagans or heathen.

To prevent originally signified to anticipate or to come before another, while it now means to hinder or obstruct. By employing the term with its modern signification it may be logically proved that the writer of the Psalm hindered or obstructed the breaking of the day, because he says, "I prevented the dawning of the morning." It is not an uncommon thing for persons who have "a case to make out," to assume that an appeal to the original meaning of terms settles all questioning concerning their present signification. The fallacy involved in such an appeal is very obvious.

The fallacy is often involved and partially concealed in the ambiguity or peculiar structure of a sentence, rather than in the equivocal character of individual words. A familiar illustration is found in the following trite syllogism:

- (1.) Nothing is heavier than lead.
- (2.) Feathers are heavier than nothing.
- (3.) Therefore, feathers are heavier than lead.

The scope of this work does not allow more extended illustrations of the various forms of fallacies.

Proof, or Proving.—In many, probably in most, cases of reasoning in practical affairs, we announce only the conclusion. If this is questioned, we go on to give what we call reasons for the assertion. These reasons are merely the suppressed or omitted premises from which the conclusion has been drawn. This process is termed proving or making proof. In

our own minds the premises preceded the conclusion, though, in many cases, nearly or quite unconsciously.

Demonstrative Reasoning.—Reasoning has sometimes been divided into demonstrative and probable. The division does not refer to the nature of the reasoning, which is the same in all cases, but to the subjects or objects concerning which the process takes place, and to the difference in the certainty of the conclusion. If the premises are absolutely and unquestionably true, and the syllogism is properly constructed, the conclusion will be true beyond question. When the judgments of the syllogism are of this kind, the reasoning has been called demonstrative. This will be the case when the propositions are mathematical axioms, or other self-evident truths.

Probable Reasoning.—In all practical affairs and in applied mathematics, the premises are not axioms or propositions which depend for their validity upon definitions alone, but statements about matters which may or may not be true. Such statements are probable truths,—that is, they are supposed and believed to be true. The conclusions, in all such cases, will be only probable truths, and the reasoning, when the syllogisms are formed of such material, is usually called probable. The degree of probability will vary, in judgments of this kind, from the barely probable to a strength of probability which amounts, practically, to absolute certainty.

Testimony. — The validity of probable judgments depends upon the evidence of testimony, and the

degree of probability attached to these judgments is determined by the nature and amount of testimony. The most satisfactory evidence is the testimony of one's own senses or personal experience. We are, usually, firm in the belief of that which we have ourselves experienced or which we have learned through our own senses.

A Baseless Distinction.—Strangely enough, a few writers appear to teach that things learned in this way constitute the only real knowledge we have; that every thing else which we suppose we know is matter of belief, and not of actual knowledge. The distinction made by such persons is imaginary, and not real. All knowledge, except that expressed by self-evident propositions, is composed of beliefs. It all rests upon the evidence of testimony. The only difference is in the witnesses, and in the directness and reliability of the testimony.

Illustrations.—I taste of some substance, and affirm that it is bitter. My affirmation is based upon the testimony of my own sense of taste. I affirm that I see objects, hear sounds, and touch rough or smooth surfaces. The affirmations, in each case, rest upon the testimony of some one of my senses. These may testify falsely, and deceive me; they sometimes do fail to give me correct information; yet, as a rule, they furnish truthful testimony, and I accept and believe their evidence without hesitation.

Must Depend upon the Testimony of Others.— The range of personal observation is very limited, and, consequently, the testimony of experience and of sense-perception can be employed in but few cases, either in practical affairs or in the study of science, history, literature, or art. We depend upon the testimony of other men and upon the evidence of circumstances, and believe, with more or less confidence, according to the character of the witnesses, and what we term the weight of evidence. The resulting beliefs constitute knowledge as real as any other.

Direct Evidence.—Direct evidence is the testimony which men give in respect to what they have themselves seen, or heard, or have, in some way, known personally and immediately. The value of such testimony is estimated by laws of evidence, derived from laws of mind, and from observed facts in respect to human conduct.

Assumptions.—In considering the weight of evidence, it is assumed that men generally will tell the truth unless they have, in a particular case, some especial reasons or motives for stating that which is false. If this were not so, no confidence could be placed in any statement of another person. Books and records of all kinds would be valueless. There could be no accumulation of knowledge, or of the materials of knowledge.

It is also assumed that the influence of motives over human conduct and speech is uniform, and that the senses are to be trusted when in their normal condition.

Circumstantial Evidence. — Indirect or circumstantial evidence is evidence derived from an accu-

mulation or a concurrence of conditions, circumstances, events, or acts, no one of which alone would be sufficient to establish the truth of a proposition. Such evidence, when subjected to proper rules, is as reliable and trustworthy as direct testimony. In the nature of things, such evidence must be depended upon in many cases of murder and other great crimes, committed in darkness and secrecy.

Rules in Respect to Circumstantial Evidence.— The following are some of the rules in respect to the reception and use of circumstantial evidence:

- (1.) The fact to be accounted for must be established by direct testimony. It must be proved directly that a murder, robbery, or theft has been perpetrated, before any person can be convicted and punished for such murder, or robbery, on the evidence of circumstances.
- (2.) The existence of all the conditions, circumstances, events, or acts, used in evidence, must be established by direct testimony.
- (3.) The circumstances, or the hypothesis based upon the circumstances, must fully account for the thing to be proved. There must be no "missing link" in the chain of circumstances.
- (4.) There must be no other circumstances, or hypotheses, by which the crime charged can possibly be accounted for.

When these rules are observed, injustice can hardly be done to one accused of crime, the proof of which rests upon circumstantial evidence.

Analogy. - In some cases, a species of reasoning

is employed called reasoning by analogy. The process of reasoning is not peculiar. The peculiarity lies in the source from which the premises are derived. The reasoning is based upon resemblances. It is assumed that, when several things resemble each other in a considerable number of points, they will probably resemble one another in still other points, concerning which we have no positive knowledge. Analogical reasoning is closely allied, in some directions, to inductive reasoning. In other directions, it is closely related to reasoning from circumstances and conditions.

Examples.—From analogy, we infer that similar conditions will be followed by similar results; that similar actions are intended to produce, and will produce, similar effects. The dog reasons by analogy when he runs upon perceiving that you are picking up a stone. He has observed that a previous similar act was followed by another act which caused him pain; he infers that the second act will follow the first in the present case.

We infer similarity of functions or uses from similarity of organs. The wings of the bird are used for flying; we should infer, if we did not know, that the wings of the butterfly were employed for the same purpose.

In all these cases, the resemblances from which we reason appear to be resemblances of relations.

Progress of Development in Reasoning.—It is evident that the mental processes of comparing and judging are the same in all varieties of reasoning,

and that these processes commence at an early period of the child's mental development. Sensations are compared and discriminated. Then percepts, and the objects which have occasioned them. Then concepts, and all other psychical products. Along with these comparisons, there must be acts of the judgment, deciding in respect to resemblances and differences and relations. A very little later, the incipient process of reasoning will begin by the comparison of judgments and the production of other judgments, in the form of inferences and conclusions. judgments and reasonings must necessarily be exceedingly imperfect. The power of judging and reasoning correctly is of slow growth, and reaches maturity later than the powers of perception, reproduction, and representation. In order that judgments may be trustworthy, considerable material must have been accumulated for examination and comparison. There must have been much personal observation, and enough experience to correct the natural tendency to make decisions as to resemblances and differences, and to put objects together into classes without studying with care a sufficient number of individual cases. The proneness to draw hasty and unwarranted inferences from faulty premises must be cured by the discovery of repeated and ludicrous blunders committed in previous processes of reasoning, and sometimes by suffering the ridicule and mortification to which one who persists in the perpetration of such blunders is necessarily exposed,

#### SUMMARY OF CHAPTER VIII. AND DEFINITIONS.

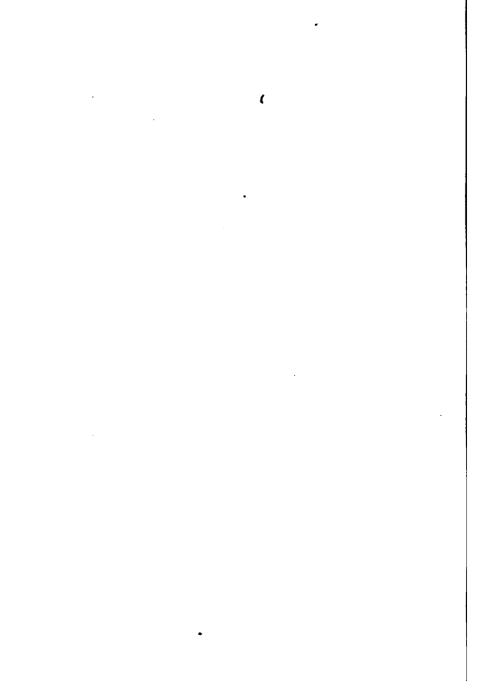
- 1. Immediate and intuitive judgments.
- 2. Judgments derived from other judgments.
- 3. Provisional definition of reasoning.
- 4. Examples of reasoning.
- 5. Complete form of reasoning; examples.
- 6. Implicit and explicit reasoning.
- 7. Inductive reasoning; illustrations.
- 8. Causes of hasty generalizations.
- 9. Definition of induction.
- 10. Deductive reasoning; illustrations.
- 11. The syllogism illustrated.
- 12. Analysis of the judgments employed.
- 13. Premises named and described.
- 14. The terms; where found.
- 15. Basis of deductions.
- 16. Illustrations by diagrams.
- 17. Negative major premise.
- 18. Fallacies.
- 19. Proof and proving; the process.
- 20. Demonstrative and probable reasoning.
- 21. Testimony, evidence, etc.
- 22. Direct evidence; assumptions upon which its value depends.
- 23. Circumstantial evidence; rules relating to its use.
- 24. Reasoning from analogy; illustrations.
- 25. Reasoning of children; the development of the power.
- **Reasoning.**—The process of comparing related judgments, and from these deriving new judgments.
- Induction. The process of arriving at general truths, laws, etc., by the examination of a large number of individual cases.
- **Deduction.**—The process of applying general truths, laws, etc., to individual cases.
- A Syllogism. A combination of three properly related judgments, two premises, and a conclusion.

## SUMMARY OF ELABORATIVE OR THINKING ACTIVITIES.

Elaborative or activities	thinking			(1.	Conception	proper	
	ULI	minering			2.	Judgment.	
	•	•	٠	• (	3.	Reasoning.	

# GENERAL SUMMARY OF THE KNOWING ACTIVITIES,— THE INTELLECT.





### CHAPTER IX.

## THE FEELINGS, GENERAL CHARACTERISTICS, AND CLASSES.

Activities thus far Studied.—The activities of mind thus far studied are all concerned in some of the various knowing processes, and grouped together are called the intellectual powers, or simply the intellect.

Associated States of Mind. — Associated with these mental processes of perceiving, conceiving, remembering, and thinking, we are conscious of peculiar states of mind. We see a friend in deep affliction; we are conscious of that state of mind which we call sympathy. We see a person, or even an animal, suffering pain and distress; we are conscious of that peculiar state of mind which we call pity. We see some one exposed to danger and harm; we experience a state which we call anxiety. We see or hear of some great act of injustice, or of the perpetration of some monstrous crime, and we are, as we say, filled with a feeling of indignation. We think ourselves to have been greatly wronged and injured by the deliberate purpose of some one; we have a state of mind which we call resentment, or perhaps by a stronger name, anger. We see or read or hear of great and noble deeds; and we are filled with what we call admiration.

How Named.—These and other kindred states of soul are known by the general name of feelings. The susceptibility of the mind to feel is called sensibility, and the feelings themselves are frequently termed the sensibilities.

Not Definable.—The feelings, being simple states of mind, can not, in the strict sense of the word, be defined. In respect to most of them a statement can be made of the circumstances under which they arise, of the causes which produce them, of the object toward which they are directed. Consequently we may learn how to arouse or excite them, and how they may be allayed or dispelled.

Name Unfortunate.—The name "feelings" is an unfortunate one to apply to these states of mind, but no better or less objectionable word has yet been found by which to designate them. In using the name feelings there is constant danger of confounding states of mind with conditions of body. It is true also that the line which separates some of the lowest and simplest mental feelings from those which are purely physical is very indistinct, as we shall discover further on.

How Some Feelings Appear to Come.—By observing through consciousness the operations of our own minds, and still more by watching carefully the manifestations of feeling in children, we discover that some feelings appear to spring up spontaneously in the soul; that is, they seem to come unbidden, of their own accord, as we say. They do not have their origin in any of the processes of thinking or

reasoning. Some of them are closely related to bodily conditions.

Animals have Similar Ones.—We observe that some of the domestic animals appear to exhibit these same feelings, or very similar ones, in a greater or less degree. The human mother manifests a certain kind of feeling toward her young child. The animal mother, in many cases, exhibits a similar feeling. Young children manifest sportive and frolicsome feelings. The young of some of the domestic animals show the same feelings. Feelings which thus spring up spontaneously are called instinctive.

Rational Feelings.—We are conscious ourselves, and we notice in others, feelings which come in consequence of knowledge which we have in some way obtained. Most of the examples previously given are of this kind, and others will readily suggest themselves. When reflecting upon our own conduct, upon our manner of life, we have a feeling of regret, or of satisfaction. Upon sight of a beautiful object a peculiar feeling arises in the soul; a scene of sublimity excites another peculiar feeling; a scene of terror, still another. Feelings which arise in consequence of reflection or other acts of knowing are named rational.

Mixed Feelings.—In some cases feelings are clearly instinctive in their origin, but are modified and largely directed by rational considerations. The love of parents for their children is a feeling of this kind. The desire for society, for knowledge, for ac-

quisition, for superiority, seem to be of the same character. Such feelings may properly be termed mixed, being partly instinctive and partly rational.

Knowledge of the Feelings Important.—A knowledge of the various classes of feelings, of the circumstances under which they naturally arise, of the modes by which they are manifested, and of the means by which they are excited and dissipated, is important to parents and teachers for several reasons. As stated in speaking of the laws of association, thinking and feeling are mutually helpful under certain conditions and mutually obstructive under other circumstances.

Thought and Feeling Helpful.—In study or reading the presence of a limited degree of feeling produces that state of mind which is called "being interested." The interest is merely the proper amount of the appropriate feeling. The knowledge excites the emotion; the emotion quickens the activity of thought; the influence is reciprocal and, in every way, desirable and healthful. In this case the thought and feeling flow along in the same direction and in the same channel. The two currents mingle together harmoniously, and acquisition becomes pleasurable and rapid. The practical problem for the student and the teacher is to learn how to produce this natural and happy commingling of the two elements.

When Opposed.—At times the thought and emotion take opposite or different directions. If the feel-

 $\tau$  has any relation to the immediate object of

study and thought, it is a relation of antagonism and opposition. The source of the feeling is foreign to the object of study. This condition of mind finds illustration in the case of a child required to commit a lesson while his companions are engaged in some noisy and exciting sport within sight or hearing; or of an older person endeavoring to master some difficult problem in mathematics or some abstruse process of reasoning just after receiving news of some great good or bad fortune.

The Mental State. - Thinking, under such circumstances, is like rowing up stream against a strong opposing current. Progress is difficult, slow, painful, and sometimes quite impossible. The problem now is to find how to change the direction of the current of feeling and to bring thought and emotion into concord.

When Mutually Exclusive. — When thought upon any subject becomes so absorbing that a state of abstraction comes on, or when feeling becomes so intense as to overwhelm judgment and reason, and the soul is stirred up as by a tempest, then thought and feeling are "mutually exclusive." This condition is altogether unnatural and harmful. In respect to such states of mind the question is how to avoid them, or to control them, if they exist. A thorough knowledge of the laws of mind will enable one to do this in most cases.

Feelings are the Active Powers—Motives.—The motive powers. A careful analysis of mental processes and states shows that some feeling precedes every voluntary act, and obviously influences the determination of the mind. Action follows feeling, and is never performed until the impulsive power of feeling is exerted. For this reason the feelings have been called "the active powers" of the soul. They are to the machinery of thought what steam is to the mechanism of the engine, the force without which there is no movement. The feelings furnish the motives, and without these the human being has no inclination to act.

A Study of Motives.—The study of the feelings is, therefore, a study of the motives which cause and control human conduct. This fact gives the study great practical value, especially to those concerned in the training and management of the young. Children can not be justly and wisely dealt with without considerable knowledge of the springs from which behavior originates, and which give volume and quality to the current of daily living.

Relations of Feelings to Morals.—Moreover, motives give moral character to human conduct, and make it praiseworthy or blameworthy. The study of the feelings, consequently, brings us to the study of morals, and sets us face to face with questions of right and wrong, of obligation and duty, and of rewards and penalties. The subjects of motives and morals are merely mentioned here, as they will receive separate consideration in another place.

Classification Difficult. — Classification. A satisfactory classification of the feelings is a matter of much difficulty on account of their great number,

great variety, and complex character. Almost every writer has a classification of his own growing out of his peculiar views, or adapted to the end for which he writes. The one here adopted is believed to be the best for our purpose.

Pleasurable and Painful.—The general division of feelings into pleasurable and painful has no practical value, since the same feeling gives pleasure at one time and pain at another; and some feelings are so complex that it is impossible to say whether pleasure or pain predominates in them. Besides, there can be no doubt that the same feeling causes pleasure to one mind and pain to another.

Emotions.—By an appeal to consciousness we discover that some feelings rise and fill the soul, to a greater or less degree, and then die away. They do not go out, so to speak, to fasten themselves upon any object, nor do they reach forth to grasp some object for self-gratification. They are simple states or excitements of mental pleasure or pain, of satisfaction or dissatisfaction; or they may be higher feelings of real joy or sorrow; or feelings produced by the beautiful or the sublime. These feelings, which thus exist in the soul and are, so to speak, confined to it, are called emotions.

Affections.—We are conscious of other feelings which seem to go forth and to fasten themselves upon objects and persons. Examples of these are the feelings which members of a family have for each other, or friends have toward friends. They include, also, such feelings as anger, envy, and jealousy.

These feelings of good-will and ill-will toward objects or persons are named affections. As employed in common speech, the affections denote only feelings of good-will. The term is here used with the wider and more technical meaning.

Desire.—We are conscious, also, of another and different feeling, which appears to reach out to grasp objects for the purpose of obtaining satisfaction or gratification. It prompts to efforts to get possession of the objects upon which it has laid hold. This feeling is called desire. It is illustrated in the feeling which impels one to labor for the accumulation of property, or to obtain knowledge, or to gain possession of any thing which is termed an object of desire.

States of Body, etc.—Certain states of body closely related to some of the mental feelings and having very similar characteristics, are usually classed with them, and studied in the same connection. These will be noticed before considering further the different classes of psychical feelings.

Organic and Vital Feelings.—In connection with the processes of digestion and assimilation there are, in a healthy condition of the physical organism, pleasurable feelings, and in a diseased condition, painful feelings. All normal activity of the bodily organs is attended with some degree of that feeling usually called comfort, a condition of quiet enjoyment such as the healthy and well-fed young animal seems to experience. All irregular and obstructed activity of these organs is attended with a

feeling of discomfort and irritation. A young child gives evidence of both these states of feeling. These conditions of body are worthy of notice chiefly on account of their close connection with some psychical feelings to be presently examined.

Appetites.—The bodily feelings best known are the appetites. If usage allowed, it would be better to speak of appetite as a single mode of feeling, excited by different objects, and hence, receiving various names. Our familiarity with these feelings renders any extended discussion of their nature and peculiarities unnecessary. They may be divided into natural and acquired, the natural being those originally implanted in the physical organism, the acquired, those created or excited by habits.

Natural Appetites.—Natural appetites are regularly recurring physical feelings, arising from some want in the organism, and causing more or less of discomfort and irritation. The feeling is allayed when the want is supplied. The frequency of the recurrence depends, to a large extent, upon habit, though in young children the needs of the body must be the controlling force in determining the times of recurrence.

Some of the Appetites.—Hunger, the feeling occasioned by need of food, and thirst, the feeling produced by need of drink, are reckoned as appetites by all writers. Concerning some other physical feelings there are differences of opinion. The sexual feeling is peculiar to itself and can not be classed among the ordinary appetites. Those feelings which

are spoken of as desires of rest, of activity, of sleep, and a few others of similar character, possess some characteristics of true appetites while they lack others. All these feelings are intimately associated with states of mind, and, for this reason, should be observed with care when these states of mind appear.

Natural Appetites Necessary.—The natural appetites are necessary for the support of life and for the proper care of the body; and their gratification, within proper limits, is clearly a demand of nature. Such gratification involves no question of morals.

Acquired or Artificial Appetites.—Acquired appetites differ from natural ones in several particulars. As a rule they are more intense and exacting. They produce a greater degree of discomfort and irritation. Their recurrence is less regular and more frequent, and they are never fully satisfied. The craving becomes almost constant. They usually grow stronger as age advances, whereas the natural become weaker and less imperative in their demands.

The most Common.—The most common artificial appetites are those for intoxicating drinks, for to-bacco, and for some kinds of narcotics, especially for opium in its various forms. The creation and growth of such appetites are in conformity with the general law of habit, and they illustrate its wonderful power.

Morals Involved.— The formation and gratification of these appetites involve moral considerations. No man has a right to debase and destroy his powers either of body or mind, or to waste upon filthy habits the means needed for higher and nobler purposes.

Relation to Motives. — The appetites create desire, and thus find a place among the strongest forces which give direction to human conduct. The gratification of appetite constitutes one of the most powerful motives with children and with large numbers of men and women of mature age. It should be kept constantly in mind that even natural appetites are blind, irrational forces, seeking only immediate gratification, and utterly regardless of ultimate consequences. They are, therefore, to be kept in subjection to judgment and reason.

Feelings Exhibited by Animals. — Young children show evidence of states of mind differing very little, if at all, from the feelings exhibited by the young of some animals. A kitten and a young lamb give evidence by sportive actions of what is called overflowing animal spirits. The feeling has its origin in the condition of the body. The functions of the physical organs are properly performed, and the consequence is an instinctive and pleasurable emotion.

Similar Feelings in Children. — A similar buoyancy of spirits is exhibited by children under like conditions. The feeling is partly physical and partly psychical, and the elements are so mingled that it is not easy to separate them by any acuteness of analysis. The activity of a child under the influence of this feeling seems as aimless as that of the animal.

No purpose can be discovered beyond the pleasure experienced in the activity itself.

Law of Pleasurable Activity.—We find here one of the earliest illustrations of the law of "pleasurable activity"; that is, that action itself is pleasurable when it exactly balances the amount of accumulated energy.

Joyousness.—This state of mind in the child is probably the lowest form of mental feeling. It may be called the emotion of instinctive joyousness or pleasure.

The Young Child.—The babe in arms exhibits a milder and less vigorous form of this feeling when its desire for its natural food is gratified, and it enjoys proper care and an agreeable temperature.

Sadness.—Both the young animal and the child are subject to a feeling directly opposite to this, springing from opposite conditions of body. It may be called the instinctive emotion of sadness or depression. It is of the same mingled character as the joyous emotion. These feelings may be taken as types of a large class of instinctive emotions, exhibited most strongly and freely by children, but never entirely disappearing at any period of life.

Irritability, etc.—Many of the manifestations of irritability, fretfulness, and so-called ill-temper in childhood are of this kind, as are, also, the manifestation of opposite states of mind and temper. These are not indications of character in the proper sense of the word, but rather of physical conditions. Children can not be justly treated unless this fact is

taken into account. They are not to be harshly dealt with for purely instinctive behavior. At the same time it is of great importance to check, in all suitable ways, and at as early a period as the development of the child will allow, manifestations of ill-humor and irritability, and to insist upon self-control. Otherwise the law of habit will create a permanent tendency to such manifestations when there is no adequate cause for them.

Rational Emotions. — Rational emotions, as previously stated, are those feelings or states of excitement which arise and continue, for a time, in the mind in consequence of some activity of the knowing powers. They may be excited by objects of sight, of hearing, and of other perceptive activities; and they may, also, be excited by recollection, by reflection, and by other processes of thinking. Those feelings which come into the mind in consequence of acts of memory have been called retrospective emotions; those which are excited by present objects and thoughts, immediate emotions; and those arising from anticipation and expectation, prospective emotions. In many cases a distinction of this kind can hardly be drawn, since objects immediately before us call up memories of the past, and, also, fill the mind with anticipations in respect to the future. The consequent emotions are of mingled origin so far as time is concerned.

Names.—The various emotions are named from the objects and ideas which excite them, or from some peculiarity in their mode of manifestation,

Joy and Sorrow. — Among the most common emotions are those of joy and its opposite, sorrow. These are experienced in every degree from the mild pleasure of instinctive joyousness to the highest state of ecstasy, and from the gentle pain of instinctive sadness to the most profound anguish. These general terms include the greatest possible variety of agreeable and disagreeable feelings. Among these are the emotions indicated by such terms as satisfaction and dissatisfaction, gladness and depression, mirthfulness and melancholy, and others of kindred character. When the joy or sorrow springs from reflection upon one's own conduct, attainments, position, or state of mind and heart, a great number of egoistic feelings are experienced, all having some degree of the quality expressed by these general names. If the retrospect is satisfactory every pleasurable feeling, from that indicated by self-approval to those named self-esteem, vanity, self-conceit, and pride, may be enjoyed. If the examination is unsatisfactory, painful emotions follow, from simple disapproval of self to mortification, selfcondemnation, regret, and remorse.

Emotions Occasioned by Wit, Humor, etc.—The emotions occasioned by wit, humor, and the ludicrous are near of kin and are classed among the pleasurable feelings. It is difficult to state, in few words, the exact sources of these feelings, but they appear to arise chiefly from the sudden and unexpected discovery of some resemblances between things very unlike in all other respects, or from

some temporary relationship between things altogether incongruous. A dog in the church or in the school-room excites a laugh on account of the supposed incongruity between the animal and the place. An elegantly-dressed fop splashed with mud, or fishing for his hat in a puddle of dirty water, excites the same expression. In these cases the feeling is produced by what is called the ludicrous. Wit and humor are entirely absent.

Wit.—Wit is a single brilliant utterance, coming like a flash. Its essence may be found in a single word, or in a play upon words similar in sound but dissimilar in meaning.

Humor.—Humor is wit which does not flash for an instant merely, but shines for a longer time with a sort of mellow and cheering light. Genuine humor is good-natured even in its sharpest attacks, while wit often bites and stings. "Wit laughs at things; humor laughs with them. Wit is abrupt, darting, scornful, and tosses its analogies in your face; humor is slow and shy, insinuating its fun into your heart."

Downward Tendency of Wit and Humor.—Unfortunately wit and humor, as commonly cultivated, have a tendency downward. Frequently vulgarity is mistaken for wit, and senseless drivel for humor. In such cases the genuine feeling of wit and humor is exchanged for contempt and disgust.

Feeling Occasioned by the Beautiful.—We are not concerned here with theories as to the sources from which the idea of beauty is derived or as to

what beauty really is. We know that some objects of sight occasion a peculiar and agreeable emotion in the mind. Some combinations of sounds produce the same feeling in a less degree. It is doubtful whether impressions through the other senses have any such influence. In cultivated minds certain ideas and combinations of ideas give rise to a similar emotion.

Objects of Sight. - In objects of sight the elements of beauty appear to be color, form, and symmetry of parts and arrangement. Motion, also, contributes to the same result. Isolated figures and bodies are more beautiful when bounded by curved or wavy lines and surfaces. In symmetrical combinations straight lines and plain surfaces are found to give equal pleasure. It is observable that the movements of single objects, either animate or inanimate, are more pleasing when in curved or wavy lines; but when numbers of objects move together according to some definite plan, so that the movements become mingled and bear harmonious relations to one another, the motions of individuals may be in straight lines, and still produce an effect equally agreeable.

Music and Poetry.—The influence of music upon the feelings is due partly to the tones themselves and partly to the power of association. A simple air, associated with the scenes and friends of childhood, often seems more beautiful than the most artistic compositions of the great masters. In poetry, also, association is as potent a factor as the rhythm of the words or the beauty of the ideas. Association is not

the source from which the notion of beauty is derived, but it greatly intensifies the effect of the beautiful, and sometimes produces essentially the same result.

Language and Ideas.—Language and ideas are properly called beautiful when they so appeal to the representative power of imagination as to fill the mind with successive pictures and images which naturally excite and keep alive an emotion agreeable and pleasing, but not too intense or overpowering. The feeling produced by the beautiful, either in nature or art, in objects or ideas, is usually soothing and charming, but never overwhelming or highly exciting.

Æsthetics and Taste.—That branch of science which treats of the beautiful and of beauty is called æsthetics. The primary idea of beauty is probably intuitive, like the idea of right. The power of mind by which the beautiful is perceived and enjoyed is taste. Good taste is the power to perceive the fitness of things and to arrange them according to fitness; and, also, to perceive the fitness of conduct and to behave accordingly. Taste is a native endowment of the soul, capable of development and cultivation like all other endowments.

Standards of Taste. — Whatever theories may be, practically the standard of taste can never be absolute; but must vary with national and local peculiarities, with the age of persons, with education, and with degrees of culture and refinement. Good taste and the love of the beautiful should be cultivated

for many reasons. Although taste, however good, is not morality, yet there is a natural affinity between good taste and good morals.

Feeling Occasioned by the Sublime, etc. — The sublime can no more be defined than the beautiful. The elements of sublimity include vastness, power, and strength. A very high, precipitous, and craggy mountain is called a sublime object. A mighty cataract, the ocean in violent commotion, a terrific thunder-storm, a roaring tornado, and other similar natural objects are sublime. The sublime in literature, generally, consists of vivid descriptions of the sublime in nature, or of imaginary pictures involving the same elements. Ideas of grandeur, of immensity, of the boundless and unlimited in space, time, or power, are properly called sublime. Most sublime objects and ideas suggest something still greater, grander, and mightier beyond or above them, and thus involve mystery and the incomprehensible.

The Sublime Differs from the Beautiful.—The feeling awakened by the sublime differs, in many respects, from that excited by the beautiful. It is more intense and absorbing. It sometimes becomes painful; occasionally it partakes of awe, and even of terror. It naturally touches and kindles feelings of reverence and adoration, and for this reason deserves to be cultivated, more particularly in the young.

Moral Beauty and Sublimity.—The feelings of moral beauty and sublimity arise in view of qualities observed in the character and conduct of beings knowing right and wrong, and, consequently, worthy

of praise and blame. These emotions may be considered further, in connection with the study of the moral powers and susceptibilities.

## SUMMARY OF CHAPTER IX. AND DEFINITIONS.

- 1. Only knowing activities studied thus far.
- 2. Other states of mind associated with these.
- 3. Examples of these states.
- 4. Sensibility and sensibilities defined.
- 5. What only can be stated of the feelings.
- 6. Why the name is unfortunate.
- 7. How some feelings appear to arise.
- 8. Feelings of domestic animals.
- 9. What feelings are called instinctive.
- 10. What feelings are rational; what are mixed feelings.
- 11. Why knowledge of the feelings is important.
- 12. Relation between thought and feeling.
- 13. When thought and feeling are helpful, and when opposed to each other.
- 14. When "mutually exclusive."
- 15. Feelings are the motive powers of the soul.
- 16. Relation of feelings to moral character.
- 17. Why classification of feelings is difficult.
- 18. Division into pleasurable and painful.
- 19. The emotions described.
- 20. The affections and desires described.
- 21. Physical feelings, vital and organic.
- 22. The appetites, Natural, artificial.
- 23. Some natural appetites. Their office.
- 24. Some artificial appetites. Moral character.
- 25. Relation of appetites to motives.
- 26. Some mixed feelings exhibited by animals and by children.
- 27. Law of "pleasurable activity."
- 28. Joyousness, sadness, irritability, etc.
- 29. Sources of the rational emotions.
- 30. From what they are named.
- 31. Joy, sorrow; emotions occasioned by wit, humor, etc.

- 32. Difference between wit and humor.
- 33. Feeling occasioned by the beautiful.
- 34. Taste; the standard of taste.
- 35. Feelings occasioned by the sublime.
- 36. Difference between the beautiful and the sublime.
- 37. Moral beauty and sublimity.

Sensibility. — The susceptibility of the mind to feel.

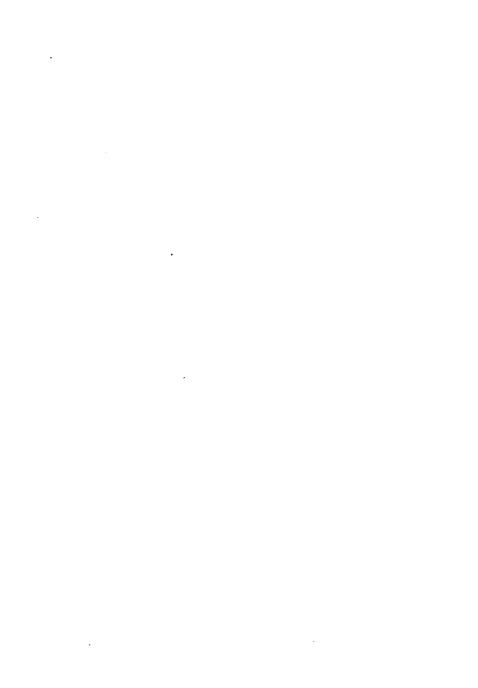
Sensibilities. - The various forms of mental feeling.

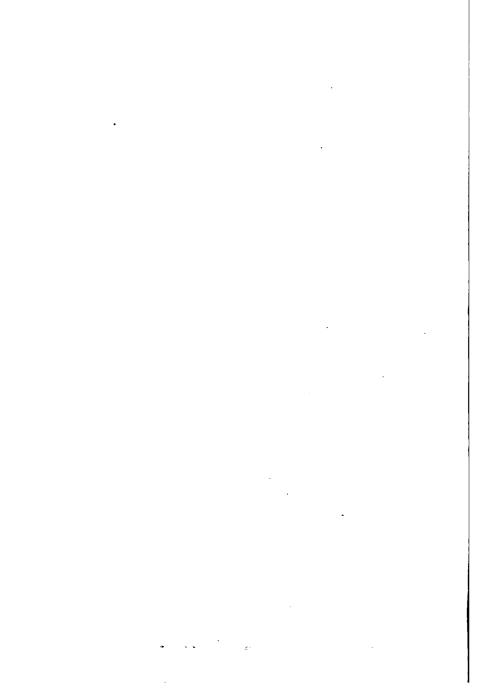
Emotions. — Excited states of mind which merely exist in the soul without appearing to go out toward others, or after any object.

**Affections.**—Feelings of good-will or ill-will appearing to go out toward persons or objects.

**Desire.**—Craving of the mind for some real or supposed good. **Natural Appetites.**—Regularly recurring longings or cravings of body.

**Artificial Appetites.**—Bodily longings or cravings produced by habits.





## CHAPTER X.

## THE FEELINGS. - (Continued.)

Egoistic Feelings.—Those feelings which center exclusively upon one's self are sometimes called egoistic. The soul is excited and aroused into a state of greater or less pleasure or pain. But self alone is concerned in the feeling. Most of the feelings of childhood are of this character. The emotions, studied in the last chapter, belong to this class.

Altruistic Feelings.—Those feelings which center upon others, which seem to go out toward others, either for good or evil, are called altruistic. The word is sometimes limited to those feelings which prompt to acts of kindness and good-will to others.

Affections Altruistic.—The affections are altruistic feelings. They are directed toward persons, and, in some cases, toward other objects. Usage justifies us in speaking of affection for inanimate objects, and even for abstract ideas. Love of country, of humanity, of truth, of goodness, and virtue are familiar forms of expression. Feeling toward inanimate objects can not be precisely like that toward persons. The affections are social feelings, and make society a source of happiness.

Classes.—The affections are variously classified. For our purpose we will divide them into three classes, but no attempt will be made to enumerate all of them.

(1.) The Beneficent Affections.—The beneficent affections are feelings of good-will, which have in view the good of the objects toward whom they are directed whenever it is possible to do good to them These include, first,—

Domestic Affections. — (a.) The domestic affections or love of kindred. These are partly instinctive and partly rational. They include the love of parents for their children, parental love; the love of children for their parents, filial love; and the love of children for one another, fraternal love. The term includes, also, the love of more remotely connected members of a common family for one another.

Parental Love. — The love of a parent for a child is clearly instinctive in its origin, but is subject to the control and guidance of judgment and reason. It bears close resemblance to the feeling exhibited by many animals for their young, but differs in some important points. The affection of animals for their young is only temporary. It continues, so far as one can discover, only so long as the young have need of special care and protection. In some cases the animal mother abandons her young before such need ceases to exist. The fondness occasionally manifested by animals for grown-up offspring, and which the latter appear to reciprocate, seems not to differ in its character from that manifested at times by animals of the same species which have no rela-

tionship to each other. It is unnecessary to say that the affection of human parents has no such limitation. In most cases it increases in depth and strength with the passage of years.

Filial Love. — Filial love must be the earliest affection of which a child is conscious. Most writers regard this feeling as instinctive. It is certainly mainly rational, springing up, at first, in consequence of care and kindness bestowed by the mother, and growing stronger as the relation between parent and child becomes better understood. It is doubtful if the young of animals have any feelings which can with truth be called filial affection. This is not a matter of surprise when it is remembered that they probably have no conception of any such relationship as that between parents and offspring.

Children at School Age.—In the majority of children of school age filial love is sufficiently developed to be one of the most active and efficient motives in the production of good conduct and industry. The proper cultivation of this affection is essential to the formation of right character and good habits. Only in the most extreme cases should the confidence of a child in the wisdom and goodness of his parents be weakened, or his regard for their commands or wishes be treated as of little consequence.

Fraternal Love. — Fraternal affection is the love of children of the same family for one another, and the mutual regard of kindred more remotely con-

nected. It is probably of instinctive origin, but, as developed and exercised, is mainly rational, springing up in consequence of daily intercourse, of giving and receiving favors and kindnesses, and from a knowledge of common relationships, interests, obligations, and duties. It beautifies family life, and is a source of mutual enjoyment and protection. There is no satisfactory evidence of its existence in animals. The herding and flocking together result from an instinct of different character.

Social Affections.—(b.) The social affections form the second group of the beneficent affections.

Friendship. — Of these the first is friendship, or the mutual love between friends. This feeling may have its origin in the social instinct, but its growth and full development depend upon rational considerations. It often begins from the natural sympathy between individuals of similar tastes and dispositions, or between persons engaged in the same pursuits, either of business, or study, or pleasure. sometimes originates from the apparent accident of proximity of residence in early life. This feeling manifests itself in every possible degree of strength, from the kindly good nature existing between chance acquaintances and temporary associates, to the intensity of devotion occasionally exhibited for each other by individuals of the same sex. Pure friendship, entirely free from admixture of other feelings, does not often grow up between persons of opposite sexes. Friendship does much to adorn and beautify human life, and its healthy development

should be helped in all suitable ways. Without this affection and the results which usually flow from it, the intercourse between men would be only such as self-interest and mutual advantages might seem to demand. They would unite to resist attacks of enemies, and to overcome obstacles too formidable to be removed by single individuals or by the members of one family or of a clan. But such unions would be scarcely higher and nobler in character than the herding together of cattle, or the flocking together of sheep or birds. They would be much like the occasional combinations of hungry beasts of prey to secure some common booty, or the crowding together of weak and timid animals for mutual protection and safety.

How Best Taught.— The most effective method of impressing upon the young the value, power, and beauty of genuine friendship is by examples and illustrations found in biographies, histories, and in the occurrences of every-day life. The stories of "Damon and Pythias" in secular history, and of "Jonathan and David" in sacred narrative, are full of interest to every child.

The Marriage Relation.—The feelings which precede and accompany the marriage relation may have their beginnings in simple friendship, but they are very complex in their character and not easily analyzed. Desire enters largely into their composition, and other egoistic and altruistic feelings are present.

Gratitude. — This feeling is called love of benefactors, or of those from whom favors and kind-

nesses have been received. It is, in a certain sense, a reflexive feeling, being directly called forth by some immediate external act. It enters into filial love and tends to render that deeper and more permanent. In some cases it becomes an element in friendship. But if it enters largely into this, the purity of the friendship is destroyed from the fact that one of the parties is placed under obligations to the other, and the freedom which comes from the feeling of equality is necessarily lost. Under such circumstances some degree of restraint on one side is unavoidable. Friendship, in the highest sense of the word, can not exist in connection with a feeling of dependence. It becomes mingled with gratitude, and thus loses its own peculiar character.

Origin.—Gratitude has its origin in a single consideration. Some good has been received and accepted. The relation is that of giver and recipient. Real gratitude may be felt and honestly expressed toward a person who can not be loved as a friend, or even esteemed as a worthy member of society. Gratitude makes no account of character or position, or of the opinions held by others of the benefactor. It looks only at the kindness done, and sees, for the time, nothing else.

Ingratitude. — Ingratitude is universally and rightly regarded as the mark of a base and despicable nature. It has no excuse and finds no defenders. Benefactors may, and sometimes do, mar the beauty of noble deeds by expecting and demand-

ing too large returns in way of acknowledgment and feelings of obligation. But even such demands, although they render the relation irksome, do not justify the withholding of that which is due.

A Rational Feeling.—It must, however, be remembered that gratitude is altogether a rational feeling, and can be but slightly felt by the young. It can take no strong hold upon the mind until the higher powers and the moral nature are considerably developed and matured. The young child is entirely dependent, is constantly receiving kindnesses and favors, but it is unreasonable to expect from him any considerable feeling or expression of true gratitude. He does not yet comprehend relations and obligations.

As a Motive.—Appeals to gratitude as a motive to good conduct or to diligence in study can produce very little effect until early childhood is passed. Disappointment is often felt by parents and teachers at the apparent ingratitude of children, while they are really incapable of experiencing the feeling to the extent demanded. The grace of gratitude should be cultivated by all appropriate means.

Patriotism.—The love for one's country is called patriotism. Patriotism properly means more than a mere feeling. It includes conduct in harmony with the feeling. It has always been regarded as praiseworthy to love one's own country and one's own countrymen above other countries and other peoples. Like most other noble impulses of the soul, this feeling is liable to be perverted and to be employed

as a motive for the accomplishment of the basest purposes. Great crimes have been committed against humanity in the name of patriotism and liberty.

Patriotism Instinctive.—From an instinctive impulse of their nature men love and cherish their own families in preference to the families of others. They care more for their immediate neighbors than for people living at a distance. Ethical questions are not here under consideration; the fact is as stated. The broadest benevolence and the highest and purest philanthropy can not be blind to this fact, nor can they condemn such natural patriotism.

Rational Considerations.—The inhabitants of the same country are neighbors as compared with men dwelling upon opposite sides of the earth. They have common interests, common needs, and common purposes. They labor, suffer, and endure in common. They have a history, a language, institutions, and laws in which all are alike interested. All these bind them together, and create mutual regard, esteem, and affection. Real patriotism is a cardinal virtue, and the lack of it a crime.

What Education Should Do.—The educational institutions of any people should aid most effectively in the development and cultivation in the young of an intelligent and rational patriotism. In such a sentiment lies the real safety of any nation whose government and laws are fashioned by the will of the body of its citizens. The history of a country should be taught in its schools. The origin and progress of the nation, the nature and form of its

government, and the modes of its administration should be made familiar to every child.

Philanthropy.—Beginning in the home and family, the feeling of good-will goes out through the neighborhood, over one's own country, and finally reaches "the ends of the earth." This affection toward men, simply because they belong to the human race, without reference to kindred, friends, or countrymen, is philanthropy in the proper sense of a much-abused word.

Comes With Development.—There is, undoubtedly, a feeble native susceptibility to this feeling in the undeveloped human soul, but its power is manifested very slowly. So far as tradition enables us to judge, it scarcely made itself felt in the childhood of the race. Men "loved," after a fashion, "their neighbors and hated their enemies," and all strangers and foreigners were counted as enemies. Philanthropy was not possible until men recognized something in common in all the race, at least a common nature, if not a common origin. It could not take its highest form until it was believed that "all nations were made of one blood."

Higher Development. — With the progress of civilization, with the increase of intercourse between nations and peoples, with the growing demands of commerce, the feeling of philanthropy has been more and more developed. The impulse of a restless love of adventure and discovery, and zeal for the propagation of religious faith, have greatly hastened this development. With still higher intel-

lectual and moral growth, with improved facilities for travel and the transportation and exchange of products, and with more intimate acquaintance, this feeling will have much greater power over the lives and conduct of men. It will not supersede patriotism, but will rather supplement it, as the love of friends supplements the love of kindred.

Effect of Proper Teaching.—All true learning and teaching broaden the mind and open it to the reception of nobler ideas and purer and better feelings. Travel produces the same effect; rightly directed study of geography and history enlarges the field of mental vision, and develops true philanthropy.

Pity, Sympathy, Compassion, etc.—The feelings indicated by the words pity, sympathy, compassion, and some others of similar character, belong under the general head of love to mankind. Since they all have certain common qualities, it is convenient to group them together. They are forms in which the feeling of good-will manifests itself under peculiar conditions. In origin they are partially instinctive, but do not appear in the early period of life with much strength.

Pity.—Pity is a feeling which is excited by the sight of any one in suffering and distress. A very vivid representation of suffering produces the same feeling. So far as the feeling is instinctive, no account is taken of the cause or occasion of the misery. It is sufficient to know that a human being is in pain. The feeling is modified by the knowledge

that the victim is reaping the natural fruit of his own sowing, or is suffering just punishment for crime, but even then it does not quite disappear. The judge may pity while he pronounces the severest penalty, and the officer of the law may pity while he inflicts it.

Sympathy.—Sympathy is a fellow-feeling, a state of mind in which one enters into the feelings of another so fully that he literally suffers and enjoys with him. It is not confined to cases and conditions of joy and sorrow, but extends to all activities, employments, and circumstances. The mother appreciates and sympathizes with her child, and the teacher with the pupil. We have sympathy with the purposes, aspirations, and efforts of our friends. Much that is called sympathy is only egoistic emotion. It expends itself altogether in the soul in which it rises. True sympathy prompts to appropriate action, and expends itself upon others rather than upon one's self.

Compassion.—Compassion is a deeper and tenderer feeling than pity or sympathy. It usually manifests itself toward those who are weak and comparatively helpless, and whose sufferings and miseries are exceedingly severe. It prompts to the breaking of fetters and the unbinding of chains. It pleads for the remission of even just punishment, when the remission can be safely granted. It is not, however, that maudlin sentimentality which confounds crime with misfortune and the criminal with the unfortunate. It would gladly turn aside the descending stroke of

justice, but it does not palliate guilt, nor make heroes of the guilty.

Germs in the Soul.—The germs of these humane affections probably exist in the souls of all children, but, in many cases, their growth is extremely slow. They need fostering care and generous cultivation on the part of all concerned in the training of child-hood. The propensity of many boys to tease, vex, and sometimes to treat with positive cruelty weaker children and domestic animals, is well known. This disposition has its origin partly in thoughtlessness, partly in love of domination, partly in the native barbarism of the animal nature, and partly in bad examples and vicious training. The feeling of compassion is yet too weak to exert any appreciable influence, and the moral nature is but slightly developed.

(2.) The Defensive Affections.—The defensive affections are feelings which prompt to self-defense and to the protection of others. They are classed by many writers among the malevolent affections. It is admitted that they have a close relationship to these, and that, in some cases, it is difficult to draw a distinct and well-marked line between them. The same thing is true in respect to economy and parsimony, in respect to frugality and avarice, and in respect to generosity and prodigality. Things are not necessarily the same because they touch each other or approach so near as to be apparently mingled together. Many forms of evil are little else than good perverted and debased.

Resentment.—Resentment is one of the defensive feelings. It springs up in the soul when we believe ourselves to have been insulted, injured, or wantonly wronged by deliberate intention, and when the injury or wrong may work serious harm to us in person, property, or reputation. It is an instinctive feeling, though modified by the action of judgment. It urges to measures of self-defense and protection. As the world now is, an affection of this sort seems necessary for the preservation of life, and for the retention of self-respect and the respect of others.

Not Retaliation.—It does not, in its legitimate form, urge him who feels it to return injury for injury and wrong for wrong. It does not propose to harm him who has done the wrong, but to prevent the commission of further injury, and to secure proper reparation when this is possible. It is not inconsistent with the spirit of forgiveness and goodwill even to enemies. It is true kindness to save a person from doing evil either to another or to himself, provided the means employed are the mildest which will secure the result. This is all that resentment, as a purely defensive feeling, insists on having done.

Easily Passes into Retaliation.—It can not be denied, however, that justifiable resentment easily gives place to a feeling of retaliation and revenge. Resentment is sure to be strong enough in all minds, and needs no nourishing, but rather restraining and curbing. It can not be suppressed, but it can be controlled.

Indignation.—Indignation is a feeling excited in view of injustice, injury, and wrong done to others, and prompts to their protection and defense, when circumstances permit us to render assistance. Like resentment, it looks primarily only to the prevention of wrong-doing, but does not disapprove when deserved punishment is inflicted upon deliberate perpetrators of injustice and crimes. It leads one to defend his friends and neighbors; one state to aid in defending another unjustly attacked, and philanthropists to seek to deliver men every-where from oppression and tyranny. The feeling is kindled when recitals are heard, or stories are read, of persecutions and sufferings endured by the weak and defenseless.

Should be Properly Cultivated.—Indignation, like resentment, is instinctive, and usually acts with all necessary vigor, provided the defense of others does not impose burdens and self-denials too heavy for the natural indolence and selfishness of ordinary humanity. Injustice and wrong inflicted upon others, especially if distance separates them from us, touches us less keenly than similar acts inflicted upon ourselves. There is, consequently, need that the feeling of just indignation receive proper cultivation and direction in the minds of the young.

(3.) Malevolent Affections.—The malevolent affections are those feelings which are directed toward others with intent to do them harm, or work evil of some kind upon them. These feelings are very numerous, and only a partial enumeration of them will be attempted. In many cases they pass, by almost

insensible gradations, into each other. Some writers believe the germs of all these evil feelings are found in resentment, and that they are merely perversions, modifications, and exaggerations of this feeling. It is hardly necessary to say that this view is not adopted in our classification.

Do not Spring from Resentment.—That some of the so-called malevolent affections are near of kin to resentment is obvious, but this can not be affirmed of others. They all appear to be modifications of a general feeling of ill-will which does not prompt, like pure resentment and indignation, to defense and protection of self or others, with the infliction of only so much harm or pain as may be unavoidable in securing these, but incites and urges to annoy, vex, and injure others with or without reference to wrong and evil received from them. This evil affection manifests itself in all possible degrees of intensity, and is named from the peculiar character of these manifestations.

Prejudice.—One of the mildest forms of ill-will is prejudice. This is sometimes a passive rather than an active condition of mind, and exists almost unconsciously without seeking expression either in speech or action. Its influence, in such cases, is more negative than positive. It shuns its object and refrains from doing possible good instead of seeking to do positive evil.

Origin of Préjudice.—It is often extremely difficult to trace this feeling to its source. In some instances it seems instinctive. Usually it has its origin in impressions made by personal appearance, by language, or by conduct. Sometimes it springs from family or party connection; sometimes from religious faith and sectarian animosity. It may even extend to places of birth and education, to employments and professions. The inquiry, "Can any good thing come out of Nazareth?" illustrates the power of prejudice, perhaps mingled with contempt, over even a good man.

When very Strong.—In its strongest form prejudice amounts to a pre-judgment and a pre-determination in respect to a person or a case. When it reaches this degree of intensity, it renders one unable to give proper weight to evidence, unfits him to act as judge or juror, and prompts to acts of wrong and injustice. Prejudice is a subtle feeling, often existing and working unsuspected and unobserved. For this reason there is need to guard against its influence both in one's self and in others.

Prepossessions.—Prepossession is a species of prejudice in favor of persons or things. This inclines one to give undue weight to testimony and arguments upon one side, and thus works injustice to the other. In circumstances where there are no opposing interests or parties, prepossessions are generally harmless and sometimes of real service.

Anger. — Anger bears close resemblance to resentment in its origin, but has no reference to personal safety or the protection of others. It is ill-will with no definite aim or purpose. In a mild and well-controlled form it is scarcely malevolent or blameworthy.

Its Tendency.—But its tendency is to pass at once beyond proper control, and to become a dangerous and violent passion. It then changes to wrath, and finally to rage.

Effects upon the Appearance.—It produces most marked effects upon the whole physical organism. "Under moderate anger the action of the heart is a little increased, the color is heightened, and the eyes become bright. The respiration is likewise a little hurried, the mouth is commonly compressed, and there is almost always a frown on the brow." When the feeling becomes rage, "the countenance reddens, the eyes flash indignant fire, and the aspect speaks horror; muscular strength is abundantly increased, and powers of exertion are acquired unknown to cooler moments."

Resembles Insanity. — The condition is very near that of temporary and violent insanity. In such circumstances a person is dangerous to himself and to all about him. Outbreaks of anger may sometimes find palliations and mitigating conditions, but very seldom any sufficient excuses. The plea of "quick temper" may be accepted from a child, but not from a man. Manhood implies self-control and self-restraint; childhood is obliged to learn these by the teachings of hard experiences. The young child can understand the necessity of putting checks upon his passions only when he comes into collision with others, and discovers the painful effects in his own person of provoking strong opposing forces and passions. Regard for one's own personal comfort and

144 ENVY.

safety is a potent motive for the subjection of passions to the control of reason, and in some cases the only effective one.

How to Deal with Children.—In the management of children it is of the utmost importance to avoid vexing and irritating them needlessly. They should be helped to form the habit of self-control at the earliest possible time. It scarcely needs to be said that example is here the most efficient teacher. An irritable, ill-tempered, easily angered person is altogether unfit to deal with young children either in the home or the school.

Envy.—Envy is the feeling of ill-will excited by the good fortune and success of others. By such success and good fortune they have become our superiors in some respects, and envy prompts to efforts to reduce them to our own level or to put them below us. The immediate result may be modes of speech intended to belittle their attainments, possessions, and characters. Sneers, innuendoes, and derogatory insinuations are freely employed. But's and if's are liberally used whenever they are subjects of conversation. In these and other kindred ways envy manifests its presence in the soul. When it becomes dominant, as it sometimes does, in the mind, it is one of the basest of all the passions. It then degrades and destroys all real nobility of character.

Envy may Enter into Emulation.—Envy frequently accompanies and enters into the state of mind called emulation. This is likely to occur when emulation in unduly stimulated by artificial and unwholesome

means. Too great care can not be taken to guard the young against this most pernicious feeling. No incentives to study or to any other desired activity, which have a tendency to create or foster this malignant passion, should be tolerated in any institution for the education and training of children. True manhood and moral uprightness are of too much value to be sacrificed for the attainment of some temporary advantage, however great it may appear.

Jealousy.—Jealousy is the feeling which arises in the mind of one individual when another possesses or seems likely to obtain possession of some object which he strongly desires, and to which he thinks or imagines he has a just claim. To the feeling of envy, jealousy adds the idea of real or supposed personal injury or affront. Another has come between us and some object of affection, has carried off some prize for which we have contested, has gained a position which we have coveted, or has thwarted our plans in some direction.

Examples.—The lower animals appear susceptible of this feeling. The pet dog is offended if another dog receives too much attention. It appears in the young child when some other child is caressed and fondled by the mother or nurse. It is apt to manifest itself wherever there is strong competition of any kind. It arises among children in school and among men in business. It finds especial room for exhibition in the relations between the sexes, and is often most intense and bitter between those who

have previously been strongly attached to each other. When it takes full possession of the soul, it becomes the most terrible of the passions, and impels to the perpetration of the most fearful and revolting cruelties and crimes.

Malice.—Malice is one of the most malignant forms of ill-will. It is a feeling which finds delight in the misfortunes of those toward whom it is directed, and seeks to do them harm in all possible ways, and by all possible means, without reference to their character or deserts.

Hatred.—Hatred is deep-seated and permanent ill-will. Anger flashes up, burns intensely, and dies out, while hatred makes for itself a dwelling-place in the soul. It has no one specific mode of manifestation, but enters into envy, jealousy, malice, and every other evil affection.

Revenge.—Revenge is one of those lurking passions which burrow in the human soul. It works in darkness and secrecy as much as possible, and takes advantage of times and circumstances. It waits and watches, like a wild beast, for its prey, and pounces upon its victim when least expected. It seeks to inflict pain and harm under the pretense of paying back what has been received, of "giving as good as has been sent," of returning to one the coin which he has paid out. It is a demoniacal passion when it ripens into full maturity. And it is the more dangerous from the fact that it often attaches itself to the milder feeling of legitimate resentment, and pretends to be what it is not.

Proper Punishment not Revenge.—The infliction of deserved punishment upon convicted criminals by officers of justice is not revenge, even though the punishment should be death.

When society has reached a civilized condition and has become regularly organized, the state, which is nothing more than the people considered as a collective body, assumes the right to make all necessary laws for regulating the conduct of its citizens, and also assumes the duty of defending and protecting their persons, property, and rights. Having enacted laws, it appoints, by some established method, officers to administer and execute these laws. Such officers are merely the servants and agents of the state, that is, of the people.

In all ordinary cases neither the judge, the jury, nor the executive officers are influenced by feelings of a personal nature. They bear no hatred, no malice, no personal ill-will of any kind against persons charged with violating law. The members of a jury may pity while they are forced by "the law and the evidence" to convict; the judge may be moved by pity and compassion while he pronounces the severest penalty which the law provides; and the sheriff may feel intensest pity while he commits the criminal to prison or conducts him to the scaffold.

### SUMMARY OF CHAPTER X. AND DEFINITIONS.

- 1. Egoistic and altruistic feelings distinguished.
- 2. The affections altruistic. Classes various.
- 3. The beneficent affections defined.

- 4. The domestic; divisions of these.
- The social. (a.) Friendship; its nature, value. (b.) Gratitude; source, etc. Ingratitude. (c.) Patriotism; origin, etc. Influence of education.
- 6. Philanthropy; comes with development; effect of proper instruction.
- 7. Pity. Sympathy. Compassion.
- 8. Only germs of these in the soul; need of culture, etc.
- 9. The defensive affections. (a.) Resentment; not retaliation, etc. (b.) Indignation; need of instruction.
- 10. Malevolent affections; general nature; do not spring from resentment.
- 11. Some of these affections. (a.) Prejudice, origin, effects when strong. (b.) Prepossession, not necessarily evil. (c.) Anger, its tendency; effect upon the physical appearance; approaches temporary insanity; dealing with children. (d.) Envy; enters into emulation, etc. (e.) Jealousy; how it differs from envy. (f.) Malice. (g.) Hatred. (h.) Revenge.
- 12. Punishment not revenge.

Egoistic Feelings. - Those which refer to self alone.

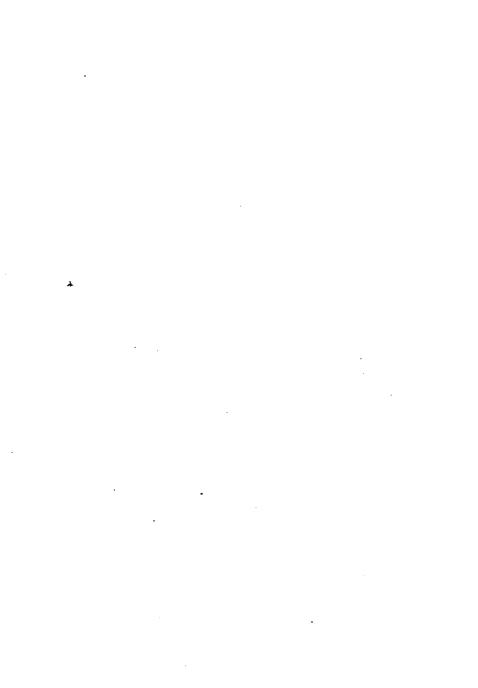
Altruistic Feelings. - Those which refer mainly to others.

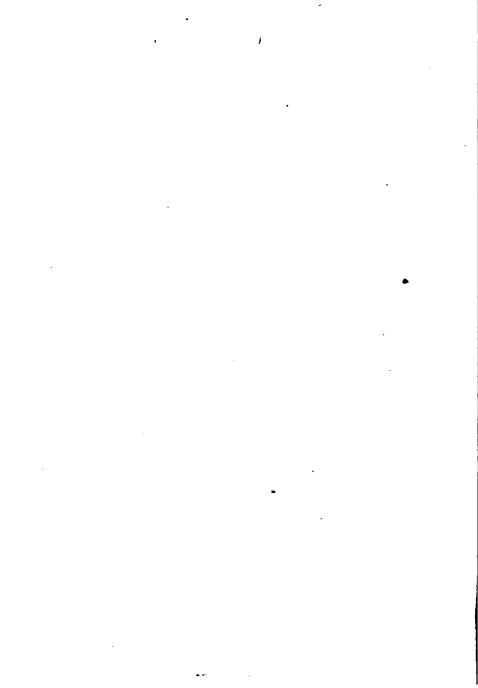
The Affections. — Feelings which are directed toward persons or other objects.

Beneficent Affections. — Feelings which prompt to acts of good-will to others.

**Defensive Affections.**—Feelings which prompt to self-defense and to the protection of others.

Malevolent Affections. — Feelings which prompt to acts of illwill and harm to others.





### CHAPTER XI.

#### THE FEELINGS-(Continued.)

Desire Defined.—Desire is the craving of the mind for real or supposed good. It may be called the appetite of the soul.

The Term Good.—The term good, as here employed, has no reference to any moral quality or character in the object of desire. The good means any thing from the possession of which it is believed that pleasure, enjoyment, satisfaction, or happiness may be derived. The good of one person will not be the good of another. The good of the child will not be the good of the man. The supposed good may not be a real good, and may not contribute to enjoyment if obtained.

Aversion. — Aversion is universally the opposite of desire. Every desire must have its natural opposite aversion.

Desire a Single Feeling.—Desire is a single feeling, but takes different names from the different objects which excite it and toward which it is directed. We, consequently, speak of a desire for knowledge, a desire for esteem, power, wealth, and so on indefinitely, as if there were so many distinct desires.

Instinctive Desire. — Some forms of desire are

instinctive. Among these are the desires for the means of supporting life, for food, drink, protection, self-defense, and many others.

Rational Desire.—Some forms of desire are purely rational, being excited by the discovery of advantages of some sort to be derived from the possession of particular objects. The desires to enter upon certain courses of life, to prepare for specific employments and professions are of this kind.

Mixed Desire.—Some desires are instinctive in origin, but are rational in their complete development, and in the course along which they impel effort for their gratification. Such are desires for knowledge, for approbation, and for society.

A Want Implied.—Desire always implies that its object is not in one's possession, or, if now in possession, is liable to be removed or lost. In the latter case the desire is for continued possession and enjoyment. The presence of a friend, now with me, affords me pleasure, and I desire that he remain. I am surrounded by circumstances which contribute greatly to my happiness, and I desire that these conditions may become permanent.

Excited by Perception.—Desire may be excited by objects immediately before me or within the range of my senses. In this case perception furnishes the knowledge through which the feeling is aroused. Even here, however, previous experience must have proved that these objects have power to give gratification or enjoyment. There is, consequently, an act of memory in reviving some past

impressions and their associated feelings. A subordinate representative element is present in the mind, and mingled with perception.

Excited by Representation.—In many cases the exciting cause of the activity of desire is a representation alone. This is the fact when we desire approbation, wealth, power, or higher knowledge. We picture, or represent mentally, the advantages and pleasures which the possession of these will afford us. Such representations may be real or ideal.

More Permanent than Other Feelings.—Desire is a more permanent state of mind than either emotions or affections. Emotions rise and subside like gusts of wind, or like clouds flitting along in the sky. Affections have usually more permanence than emotions, but they are, by their very nature, variable and inconstant. When they reach the intensity of passions they speedily burn themselves out and expire. Desires, on the other hand, have an element of permanence in them. They come near to being dispositions or tendencies of mind, acting constantly and uniformly. The same desire continues for months and years, or even for a life-time, approaching, in some cases, to the nature of a "ruling passion."

The Universal Motive.—The great importance of desire lies in the fact that it is the one universal motive to all voluntary human activity. Its peculiar relation to the will is more fully considered in connection with the study of that activity of mind. It is the one feeling which moves the will. The other

feelings are motives only as they excite desire and intensify its energy and impulsive force. External objects are motives simply because they appeal to some form of desire. Voluntary activity does not begin until desire is kindled; it ceases when desire dies or is satisfied.

Self-Love and Selfishness.—Self-love, so-called, is desire looking in the direction of self, and seeking those things which self particularly needs. Among these are the preservation of life, personal safety, all legitimate freedom of action, opportunity of acquiring property and knowledge, means of self-development and improvement, and of doing good to others. These are all proper objects of desire, and are consistent with the great law, "Thou shalt love thy neighbor as thyself." Self-love, thus understood, is not selfishness, the essence of which is supreme regard for self, and disregard for others if their rights and interests conflict with one's own.

No Specific Desire for Happiness.—All desires have in view some good,—using the word with the widest possible signification,—to self. This good may be the simplest form of personal gratification and enjoyment; it may be the pleasure which arises from witnessing and ministering to the enjoyment of others; it may be the satisfaction which comes into the soul from the consciousness of doing one's duty, of meeting one's obligations, of making the best of one's powers and opportunities, and of living in harmony with one's self, with one's neighbors, with all mankind, and with the Divine Being.

True Happiness.—Such satisfaction of soul is the substance of true happiness, which is the end sought by the highest rational desires. According to this view there is no single specific desire for happiness. Indeed, happiness can not be made a distinct object of pursuit, since it consists in a state of soul consequent upon the highest and best activity of all the powers both of body and mind. This touches the moral aspect of the desires and their proper use as motives, and belongs with the study of the moral powers.

The Term Love Used for Desire.—The feelings called love of knowledge, love of power, love of money, and others of similar nature, are found, upon careful analysis, to be forms of desire. We have no affection for these objects; the soul does not go out in good-will toward them; we do not wish good to them in any sense. We value them because we believe they will contribute to our own enjoyment, pleasure, or happiness. We labor for them and strive to get possession of them for this reason alone. It may be said, and in some cases truthfully, that we seek them in order to use them for the good of others. But this very mode of use contributes to our highest and purest enjoyment. There is no more profound pleasure than the feeling which arises in a soul conscious of earnest and unselfish effort for the good of sentient beings. All these feelings are, therefore, to be classed among desires.

Forms of Desire Very Numerous.—It would be impossible to enumerate all the different forms in

which desire manifests itself. A few only will be named here, some of which have already been mentioned.

Some Instinctive Desires.—Among the instinctive are the desires for the gratification of appetite, for the preservation of life, for personal safety and protection, for self-defense when attacked, and for the good and protection of those for whom we have special affection. This last is mingled with the social instinct.

Origin of the Higher Forms of Desire.—Most of the higher forms of desire have their origin in some native tendency or appetency of the mind, but take their direction and much of their strength from expectations of advantage and pleasure of some kind discovered by the knowing activities of the soul. Such manifestations of desire may be called rational. A few forms may be purely rational.

Desire of Society.—The desire for society exhibits itself very early, and in its first manifestations is altogether instinctive. It is evident that it does not originate in the natural tendency of the young to imitate the older, nor in considerations of safety and other advantages. Later in life it, undoubtedly, takes direction from the conclusions of judgment and reason in respect to personal interests, and real or supposed utility.

Desire of Knowledge.—The desire for knowledge appears first as native curiosity; in maturer years the feeling is rational. The young child seeks to find out things from an almost irresistible impulse,

just as he seeks to use his limbs and his vocal organs. This is one of the strongest motives for the activity of childhood, both physical and mental. The resulting enjoyment appears to spring from the law of pleasurable activity, and not from the pleasure of acquisition, nor from regard for the use or value of knowledge.

Change with Age. — With increasing years the power of curiosity, properly so-called, diminishes, and a rational love of knowledge takes its place. The pleasure resulting from the acquisition of knowledge is of a mingled character. There is pleasure in the mere exercise of the knowing activities, in perceiving, reproducing, imagining, judging, and reasoning. There is pleasure in the mere consciousness of having mastered difficulties, and in the simple fact of possession. Regard for the value and use of knowledge, in many cases, increases the pleasure.

Desire of Approbation and Esteem.—Desire for approbation and esteem exhibits itself at a very early period of a child's life, and constitutes one of the motives of childhood. In riper years it still remains a motive, good or bad according to the direction which is given to its power. A reasonable regard for the good opinion of others is certainly a proper feeling, and seems necessary to the attainment of the highest excellence of character. When such regard becomes undue and excessive, it tends to destroy integrity and manliness. The practical problem is to determine how much influence this desire may be allowed to exert at particular times

and under particular circumstances, and how much appeal should be made to it as a motive in dealing with the young.

Desire of Superiority.—The desire of superiority assumes almost an infinite variety of aspects. It closely resembles, in some manifestations, the love of authority and power; in other directions it differs widely from that feeling. It does not look to the exercise of dominion over others. It urges to efforts to attain superior excellence, superior knowledge, superior rank and position, but not for the purpose of rendering others inferior or subservient. The desire may only seek to make the most and best of one's own abilities, resources, and opportunities, to reach the highest possible personal excellence.

Emulation.—In schools this desire often takes the form of emulation, and leads to endeavors to surpass others for the sake of obtaining some rank, position, prize, or other mark of honor and distinction. As a motive emulation has great power, and may be employed under sufficient safeguards and limitations. But it needs no artificial stimulus, and should be appealed to very seldom in the management of children.

General Influence.—In the world at large this feeling of emulation exerts a very powerful influence. The progress of humanity has been, in many directions, accelerated by it. It has caused improvements in neighborhoods, villages, and cities. It has helped to give us better steam-ships, better railway coaches, better school-houses, and many other better facilities and conveniences.

Desire of Acquisition.—The desire to acquire and possess material things makes itself felt as soon as a child becomes acquainted with external objects, and has sufficient strength to grasp them. At first the pleasure seems to be that of possession alone, with no reference to use or value. In a few singularly constituted minds this form of pleasure appears to continue into mature years. The miser hoards money for the mere enjoyment of hoarding and holding. In his earliest efforts at acquisition the child recognizes no right of ownership in others. The world is all his own. The notion of mutual rights and obligations is slowly acquired in the process of mental and moral development.

Right to Hold Property.—The right of every individual to acquire and hold property as his own personal and private possession, appears to be recognized by all men and in every state of society and under all forms of social and political organization. The idea of such right may be intuitive, or it may originate in the teachings of experience and observation in respect to the advantages of private ownership both to individuals and to society. That the right of private and personal acquisition and retention of some kinds of property may need to be restricted and limited for the general good, must be admitted. It is, however, a matter of very great practical difficulty to determine the nature and extent of such restrictions and limitations.

Desire of Power and Authority. — The desire for power and authority shows itself even in young

children. It seems to find gratification in controlling inanimate objects, and in exercising dominion over animals. By an easy transition the child finds pleasure in mastership over other children. The boy prefers to be "driver" rather than "horse" on the playground, and to be an officer instead of a private when he acts the part of a mimic soldier.

In Later Years. - With advancing years the desire seeks higher modes of gratification, and mingles itself with various other feelings. The desire for knowledge as a motive to study is re-enforced by the pleasure which comes from intellectual mastership. The line can not always be clearly marked between the love of power and the love of excellence. This desire has its own appropriate field of activity, and within that field is a most useful and effectual spur to legitimate exertion. Control over the forces of nature and over the animal creation is necessary to the progress of civilization, and to the highest development of the human race. The desire in man for dominion over his fellows may be productive of good, but is usually a source of great and terrible evils. It gives birth to tyranny and despotism.

Ambition. — Ambition is a term of ambiguous meaning, but it is generally employed to denote an inordinate desire for honor, place, and power. It is sometimes used as a name for any strong desire, and thus it comes to have a good as well as bad signification. We speak of individuals as being ambitious to become excellent, to become learned, to be useful, to do good, and to make others happy.

Some Complex Feelings.—A few complex feelings in which desire or its opposite aversion is an important element must be briefly noticed.

Hope.—Hope is desire and expectation. We hope only for those things which we believe to be desirable and attainable. Hope, in any particular case, is strong or weak according to the strength of expectation. When all ground for expectation crumbles away hope expires. Desire moves to action only when it is presupposed that the object of desire is attainable by efforts which we are capable of making, and by means which we can control. Tentative efforts may be and often are put forth to ascertain the possibility of attainment, but these are merely preliminary to any deliberate and settled course of action.

Despair.—Despair is the opposite of hope. There may be intense desire, but no expectation, rather a full conviction that the object desired is unattainable. The depth of the despair is often in proportion to the intensity of the desire. Despair, also, arises from the anticipation of some great evil from which we can discover no way of escape. In this case there is desire of escape and safety, but no expectation of averting the coming doom.

Discouragement.—Discouragement is an incipient form of despair resulting from a discovery of unexpected obstacles and from weariness produced by protracted and fruitless efforts. Encouragement is the opposite feeling, and follows unexpected success, or unlooked-for help or relief. Discouragement par-

alyzes one's powers, as encouragement redoubles their energy and activity.

Apprehension, Alarm, Fear, etc.—Apprehension, alarm, fear, dread, and terror are terms denoting different degrees of the same feeling. There is anticipation of evil or danger, either near at hand or approaching, accompanied by doubt as to one's power to escape from it or to avert it. When the evil is indefinite, and is supposed to be remote, the feeling is merely apprehension. The mind is uneasy but not seriously disturbed, and the external appearance is not much affected.

Alarm. — When the evil is believed to be close at hand, and its greatness is magnified, the feeling becomes alarm. The appearance and conduct of a person, under the influence of this feeling, exhibit evidence of great perturbation of mind, and frequently of the absence of judgment and reason.

Fear.—Fear is a general name to denote any moderate degree of the feeling which accompanies serious anticipation of evil, danger, pain, or suffering, either near or remote.

Dread and Terror.—Dread is a deeper and more permanent feeling, while terror is an exceedingly intense and violent form of fear. It produces usually great agitation both of body and mind, and renders sound judgment impossible. Like every other form of excessive feeling, it can continue but a short time. These are only a few of the feelings in which desire or aversion appear in greater or less degrees of strength.

# SUMMARY OF CHAPTER XI. AND DEFINITIONS.

- 1. Desire defined.
- 2. Use of the term good.
- 3. Relation of aversion to desire.
- 4. Desire a single feeling.
- 5. Instinctive, rational, and mixed desires.
- 6. Desire implies a want.
- 7. How desire is excited.
- 8. Desire more permanent than other feelings.
- 9. Desire the universal motive.
- 10. Self-love and selfishness.
- 11. No specific desire for happiness.
- 12. The substance of true happiness.
- 13. The term love used for desire.
- 14. Forms of desire very numerous.
- 15. Some instinctive desires.
- 16. Origin of the higher forms of desire.
- 17. Desire of society.
- 18. Of knowledge.
- 19. Of approbation and esteem.
- 20. Of superiority, emulation.
- 21. Of acquisition.
- 22. Right to possess and hold property.
- 23. Desire of power and authority. Ambition.
- 24. Some complex feelings, (a.) Hope, (b.) Despair, (c.) Discouragement, (d.) Apprehension, (e.) Alarm, (f.) Fear, (g.) Dread and Terror.

**Desire.**—Craving of the mind for real or supposed good.

**Good.**—That which, when rightly used, contributes to real and proper pleasure, enjoyment, satisfaction, and advantage.

**Highest Good.**—That which contributes to the highest advantage and happiness. The highest happiness of man results from the right employment of all his powers and capacities.

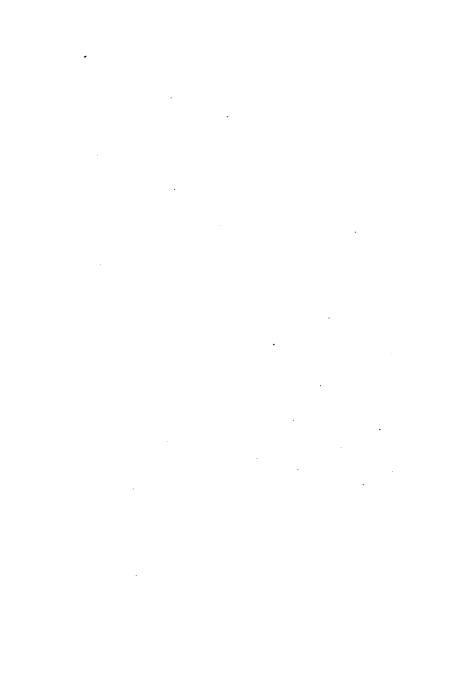
# GENERAL SUMMARY OF THE FEELINGS.

- Origin of the Feelings.
   RATIONAL CONSIDERATIONS.
   Instinct and Reason.

  - $\begin{cases} 1. & \text{Organic and vital.} \\ 2. & \text{Appetites.} \end{cases} \begin{cases} 1. & \text{Natural.} \\ 2. & \text{Acquired.} \end{cases}$
  - 1. Instinctive.

2. Classes.

- (1. Beneficent.
- 3. Affections. 2. Defensive.
  3. Malevolent.
  - 4. Desire and Aversion. Forms various.
  - 5. COMPLEX FEELINGS, IN WHICH DESIRE AND AVERSION APPEAR.



#### CHAPTER XII.

#### THE WILL.

Automatic Movements.—Certain movements of the physical organism necessary to the continuance of life go on, as we say, of themselves. Among these are the beating of the heart, respiration, the processes of digestion, and some others. Such movements are called automatic. Those named are automatic from the beginning of life.

Force of Habit.—Some other movements of parts of the body become nearly automatic by force of habit. It is only necessary to start these movements by an act of the will. When once begun, they continue without conscious attention until the organs become fatigued, or the purpose has been accomplished. Walking is one of these forms of activity. At first, to the child the process is full of difficulty and labor, and requires a strong and constant effort of will. Gradually it becomes less and less difficult, until finally it is performed almost automatically. The same is true of the movements of the hands and fingers in playing the piano and other musical instruments, of the movements made in writing, and of the movements made by all artisans in their work.

Articulate Sounds.—The complicated movements of the muscles concerned in the production of artic-

ulate sounds, either in speaking or singing, are still more wonderful in their character. After sufficient practice, the singer or speaker has only to think of the desired sound, or combination of sounds, and the muscles instantly make all the required movements. In these cases, not only single movements, but whole series of movements, seem to become almost if not quite automatic.

Random Movements.—Many of the movements of the body and limbs made by the young child are apparently random and entirely aimless. Automatic activities have a purpose, while these have none. They can not, therefore, be properly called automatic.

Instinctive and Reflex Movements.—Some other bodily movements, automatic so far as any act of the will is concerned, are of a peculiar character, and are called, sometimes instinctive, and sometimes reflex. They are executed by "an impulse acting prior to experience or instruction," and for this reason may be named instinctive. They are made in response to some external provocation, excitant, or stimulus, without the intervention of the will, and for this reason may be called reflex.

Examples.—Among these are the movements of a young child in sucking when the finger is placed between the lips, in swallowing when any thing is placed upon the tongue, and in closing the fingers when the palm of the hand is touched. The acts of winking when something is brought suddenly near the eye, of dodging to avoid a blow, and of ducking

the head at the whistling sound of a bullet, are of this kind.

Voluntary Movements. — Before most other movements of the body, and before the exercise of most of the knowing activities of the mind, we are conscious of an antecedent psychical activity by which we choose, decide, or determine to do the act. Before turning the head, raising the hand, or stretching out the arm, we choose and determine to do these acts. All such movements are called voluntary, and the mental activity by which we choose and determine to do them is called the will.

The Will.—The will is the executive power of the mind, the power by which all other voluntary activities are controlled. The nature of this power can be best learned by analyzing its complex action in some particular case.

Illustration.—Two objects are placed before me, and I am told that I can have one of them and may take my choice. Something is here presented to be done, and an alternative is offered. I am allowed freedom in selecting. Without such freedom there could be no such thing as choice. If only one object were before me, there would still be opportunity for choice, provided I am permitted to accept or reject it.

Examination and Deliberation.—I proceed now to examine the objects, to compare their values, to consider and deliberate; I use judgment and reason. There can be no choice, in the proper sense of the term, without time for deliberation and careful com-

parison. In some cases much time may be required from the fact that many things have to be considered.

Preference, Choice, and Desire. — After examining and comparing the objects, estimating the advantages to be derived from the possession of each one, or the enjoyment and pleasure they are expected to give, either immediately or in the future, I come to have a feeling of preference for one object over the other. The feeling of preference excites the feeling of desire. In consequence of this feeling I make choice of that object.

Volition.—Following this mental act of choosing I decide, or determine, to make the object my own by such physical action as may be necessary. This final psychical act is called volition. It is the last of a series of consecutive activities of mind, the crowning executive act of the will. Whether, in any particular case, immediate external activity follows this final psychical act, depends upon conditions and circumstances. The mental activity of willing is complete even if such outward action should never take place.

Steps in the Process of Willing.—The successive steps of this complex process can be easily traced. (1.) Some object or objects of perception or of thought must be presented. The object may be external and real, or it may be a mental concept or picture.

(2.) There must be time and opportunity to know the object or objects. Examination, comparison, and deliberation must be had.

- (3.) This examination must reveal qualities or characteristics in the object which, when known, will affect the sensibilities; that is, will excite some feeling in the mind. The feeling may be an emotion or an affection, but the final result must be either desire or aversion, so that the object is pronounced desirable or undesirable.
- (4.) Following this examination and the feeling excited, the mental act of choice takes place. If the final feeling is desire, we choose to have the object; if it is aversion, we refuse the object, or choose not to have it. There must be perfect freedom of choice.
- (5.) The psychical act of volition is put forth, and the series of mental activities is completed.

Desire Precedes every Act of Volition. — Our analysis reveals the fact that final acts of willing are preceded, in all cases, by desire; and that desire is excited by the discovery of some real or supposed good which may be possessed, or which we believe may be possessed. The real motive therefore, in the soul, is some form of desire; but, in common modes of speech, those things which appeal to the mind in such a way as to excite desire, are also called motives.

Freedom of the Will.—With the vexatious controversies concerning the power of motives and the freedom of the will we have no occasion to concern ourselves. It is sufficient to say that the mental activities called willing are performed, like all other psychical acts, in accordance with the general laws of mind. The will is as free as perception, or judg-

ment, or imagination, when it is permitted to act without compulsion or restraint imposed by any external power or authority.

Testimony of Consciousness.—We are conscious of no irresistible compulsion in our acts of volition, more than we are in acts of judging. We feel that we could have chosen differently, and could have adopted a different course of conduct. So far as we can learn, all other men have the same feeling of freedom.

Feeling of Responsibility.—In consequence of this sense of freedom we feel responsible for our determinations and our conduct. We are subject to feelings of self-condemnation and remorse, to which we could not be subject if not free in respect to volitions and behavior.

These Feelings Universal.—So far as our knowledge extends our associates and all men share in these feelings. All rules and laws for the regulation of human conduct in the family, in the school, in general society, and in the State, are based upon the conviction that men generally can do or can refrain from doing according to their own pleasure. In the administration of justice and in the infliction of punishments, regard should be had, in individual cases, for the influence of heredity, environment, and education. This does not invalidate the universal law of human responsibility.

The Strongest Motive.—It is frequently affirmed by those who deny the freedom of volition that we always act, and must act, in the direction of what is called the "strongest motive"; that the "prepon-

derance of motives" in all cases determines our actions. This may be admitted without hesitation, since, in substance, it is only another way of saying that the motive which prevails is, for the moment, the strongest, the fact of preponderance being the sole criterion by which its relative strength is determined. The inference is that since the will is thus influenced by the strongest motive it can not be free in its choice; in other words, it can not choose otherwise than it does choose.

Essence of Freedom of the Will. — The fallacy here is in the tacit assumption that the will has no power in determining the "strongest motive" or the "predominance of motives." The essence of the freedom of the will consists in its power to give "predominance to motives," or to make any selected motive the strongest for the time. It is a familiar fact that the action of motives upon us is not uniform. A motive which is very strong at one time, at another moment is almost powerless. Dr. Carpenter says, "Reflection on our own mental experiences will satisfy us, that these variations in the relative strength of motives mainly arise from the degree of attention that we give to each respectively. An excited feeling which would soon die out if left to itself, will retain its potency, or even gain augmented force, if we allow ourselves to brood over it." If we turn from it, and refuse to harbor it, it has very little power over us, and presently disappears. The will, consequently, "determines the preponderance of motives" by giving direction to attention.

The Will Feeble in Young Children.—The power of the will in the young child is very feeble, and the development of this power is very slow. One of the most important objects of education is to give the will supreme control over the whole being so that every voluntary activity, both of body and mind, shall yield perfect obedience to its commands. It is only then that man is master of himself.

Regular Order of Activities. — Relation between knowing, feeling, and willing. The relation between knowing, feeling, and willing has been already indicated, but the importance of this relation will justify a little repetition. In a series of psychical acts, involving all these modes of activity, a regular order of succession is easily discovered by an appeal to consciousness, and even by observation. We do not determine to do, or not to do, until we feel the impulsive force of desire. Desire is not excited until we have some knowledge concerning any proposed course of conduct, or about any object brought before us. We do not will until we feel; we do not feel until we know. The necessary order, therefore, is, first, knowing; second, feeling; and last, willing.

Movements Rapid.—The movements of the mind are so rapid that often the three modes of activity seem to take place simultaneously. No appreciable space of time passes between the reception of knowledge and the act of volition. For example, we are informed that a neighboring house is on fire and a friend is in great danger. The knowledge is in-

stantly comprehended, the feeling of love and sympathy is excited, the desire to render assistance is aroused, and we start for the scene of danger. We set out before the story has been fully told. But even here there can be no doubt as to the order in which the mental acts have occurred.

Reflex Influence. — This view of the relation is, however, only a partial one. There is a reflex action of feeling upon knowing, and of knowing upon feeling, which is of the highest practical importance. Such mutual reaction increases very largely the productive power of the mind.

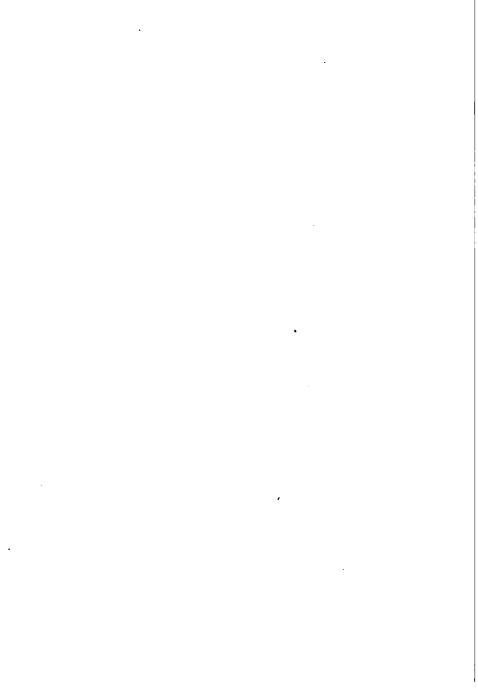
Illustration. — A child commences to read or study a book. The information given in the first pages creates an interest; that is, excites a certain feeling in his mind. This feeling spurs him to read or study more eagerly. The added knowledge increases the feeling of interest. The desire to know more becomes intensified and acts more vigorously upon the will. The will commands the attention and holds all the necessary activities of mind and body steadily to the work of mastering the contents of the book. Acquisition is thus rendered easy, rapid, and agreeable. In this and in all similar cases feeling greatly accelerates the process of learning. As previously stated, when the feeling becomes too intense or takes a wrong direction, it hinders the knowing activity or entirely paralyzes it. Naturally the various powers of the mind work in harmony, and the effort of the student and teacher should be to create and preserve an equilibrium between their activities.

## SUMMARY OF CHAPTER XII. AND DEFINITION.

1. Movements or activities.   { 1. 2. 3. 4. 5.	Automatic. Random. Instinctive. Reflex. Voluntary.
2. Steps in the process of willing	Objects, etc., presented to the mind.  Examination and deliberation.  Feeling excited. Choice.  Volition, executive act.
3. Evidences of freedom in $\begin{cases} 1. \\ 2. \\ 3. \\ 4. \end{cases}$	Consciousness.  Observation.  Feeling of responsibility.  Universal belief.
4. Relation and order of mental activities $\dots$ 12. 3. 4.	

The Will.—The mental activity of choosing and determining, or the executive power of the mind.





#### CHAPTER XIII.

#### THE MORAL NATURE.

Not another Nature.—The moral nature is not another and different nature from that which we have been studying. We have here the same intellect, the same sensibilities, and the same will.

The Moral Nature Defined.—The moral nature is the mind knowing, feeling, and willing upon and concerning matters of right and wrong, of worthiness and unworthiness, of obligation and duty. It is the mind inquiring as to the reasons for bestowing praise and blame, for speaking of merit and demerit, for believing in such distinctions as good and bad in character and conduct.

The same Processes.—We perceive, think, and reason concerning these and similar questions just as we do of all other matters. Some apparently different forms of psychical activity and different modes of feeling necessarily appear, when moral questions are considered, on account of the peculiar nature of such inquiries. The activity of conscience can be exercised only when the mind is debating about right and wrong; the feeling that we ought or ought not can be excited only when obligations and duties are presented and urged.

Intelligence and Freedom Necessary. —In order

that a being may have a moral nature and be justly held responsible for his conduct, he must be intelligent enough to distinguish right from wrong, and free enough to be able to choose and to pursue one of these in preference to the other. These two conditions appear to exist in all men.

Idea of Right and Wrong. — We find ourselves in possession of an idea of right and wrong. We can not recall a time in our lives when we did not have this idea with some degree of distinctness. We are unable to determine whence or how we first obtained it, or from what source it came. We observe that all our friends and neighbors have the same idea, and all the people with whom we have ever associated. All the tribes and races of men of whom we have heard or read appear to possess this notion with varying measures of clearness. It is said that in all languages, ancient and modern, terms are found to express a radical moral distinction between right and wrong. This distinction exists every-where to-day, and has existed as far back in the past ages as history or tradition can be traced. It is universal.

An Important Distinction.—This general notion of a right and a wrong must, however, be carefully distinguished from the belief that certain specific characters and actions are right and certain others are wrong. Concerning the particular things regarded as right or wrong, differences of opinion will be discovered even in the same community. The reasons for such differences will be discussed in an-

other place. It is only affirmed here that all men recognize the idea of moral goodness and moral badness, and that they all consider some things morally right and others morally wrong.

Source of this Idea. - Moral intuition. How came men in all ages and every-where to have this idea? From what source did it come, and in what way did it originate? Different answers are made to these questions. It may not matter practically whether we suppose it has been inherited or has been given us by an original power of the mind. I believe it to be one of the intuitive ideas, or intuitions, of the human soul, a product of intuition or the intuitive activity of the mind. This is the same psychical power which gives us all other intuitive ideas. But on account of the peculiar nature of this idea, the power may be called moral intuition, if it is kept in mind that the term moral is employed simply for convenience to designate the particular direction in which the activity is here exerted.

Moral Perception. — In addition to this primary notion of right and wrong, which seems to be a common possession of all mankind, history teaches that men in all ages have been in essential agreement concerning the moral nature of some actions whose characteristics are strongly marked and readily discovered. We find men still in this state of practical agreement.

Things Considered Wrong. — Murder, robbery, unprovoked personal violence, stealing, lying, and some other similar deeds, have always been, and are now, condemned as wrong without argument or prolonged consideration. They have never been approved or defended except under peculiar circumstances and for obvious reasons.

Inferences from Peculiar Conditions of no Value.— Inferences drawn from what may be said and done in a state of war, or in a condition of mutual hatred into which men can, without doubt, be educated, have here no relevancy. At such times the ordinary laws of judgment and behavior are evidently overborne and held in abeyance by excited passions and brute violence.

Things Considered Right.—On the other hand it has, in all periods, been regarded right and praiseworthy to protect and defend the weak, to provide for the needy, to relieve those in distress and trouble, to deal honestly in business, to observe the requirements of justice and mercy, to speak the truth, to be faithful to promises, and to live a life of purity and self-restraint.

Moral Perception.—Something in all human souls, whatever the external conduct may be, appears to discover in these and kindred acts an element of moral right, as in deeds of an opposite character it discovers the quality of moral wrong. This something may be called moral perception, that is, the ability of the mind to perceive, with little or no instruction and guidance, the moral qualities of many of the most simple and most easily comprehended human actions. Its power is not sufficient to grasp and resolve complex problems of conduct. This ac-

tivity may be considered as only the incipient and slowly developing moral judgment; but it seems best, on the whole, to speak of it as a distinct and separate activity of mind.

Moral Judgment. — In respect to all complicated questions of right and wrong, of obligation and duty, we proceed to make inquiries and to seek information just as we do in relation to all other matters. We do not expect to receive unerring direction from some inward monitor without the use of our ordinary mental powers. We seek to learn what ought and what ought not to be said or done in precisely the same way in which we set about learning other things. If a certain course of conduct, or a particular manner of life is urged upon us, we inquire concerning the influence which will be exerted by it and the consequences which will probably follow its adoption. If in doubt, we ask the opinions and advice of those who are, as we believe, better qualified than ourselves to decide wisely and correctly as to the right or wrong of the proposed conduct or manner of life. Having thus sought and obtained all possible information, we come to conclusions and make decisions as to right and duty by employing the same powers and exercising the same activities of mind which we employ in reaching conclusions and making decisions about matters of business, or about questions in history, or literature, or in science, or art, where no moral considerations are involved.

Nature of the Process. — The process is one of examination, comparison, and conclusion. These are

functions of the judgment. The activity is here, as in the case of intuition, exerted in a special direction, and, for this reason, the power may be called the moral judgment. The term moral merely indicates the peculiar province in which the action takes place, and not any peculiarity of the activity itself.

Limitations of the Judgment.—In this field, and when deciding ethical questions, the judgment is limited by the same conditions and is obedient to the same laws as in any other field, or when examining problems of any other nature. It decides according to the knowledge possessed, and according to the accepted moral standard. It is no more infallible here than elsewhere, and frequently makes faulty decisions.

Conscience.—Whenever a decision of the judgment has been rendered we are conscious of some activity or impulse of mind which insists that this decision shall be respected and obeyed. This inner power demands that, in all cases and under all circumstances, we shall do what the moral judgment declares to be right, and shall refrain from doing what it pronounces wrong. It forbids all evasion, or compromise, and is satisfied with nothing short of direct and unqualified submission to its requirements. This power is conscience.

Nature of Conscience.—Conscience is the supreme and only peculiar psychical activity of the so-called moral nature. It is, according to this analysis, an executive and not a judicial activity of mind. It leaves the judgment to decide all questions of right,

obligation, and duty, and only concerns itself to have these decisions recognized and carried into full effect. As thus defined, conscience itself can make no mistakes, and is always to be obeyed. This is only another way of saying that a man should at all times and under all conditions do that which he believes, after the most patient, thorough, and honest examination, to be right; and should abstain from doing that which he believes to be wrong, or concerning which he has any serious doubts.

Use of the Term Conscience. — The term conscience is frequently used to designate the entire moral nature, and more frequently to denote the moral judgment and the moral executive power of the mind. While such usage can plead good authority, it, nevertheless, causes much unnecessary perplexity and confusion in the minds of the young. Referring to such perplexity and confusion, a very acute writer says: "It seems to me easy enough to solve this difficulty. The judgment pronounced by the conscience in each particular case is, in reality, composed of two judgments: (1) Such an action is your duty; (2) Perform this action because it is your duty. Now, in the first of these judgments the conscience may be mistaken; for it may happen that a certain action which I believe to be my duty is not my duty. But it is not mistaken in the second; for, if it is certain that any given action is my duty, I ought to perform it. If, then, it be agreed that the name of conscience shall be applied only to

the second of these judgments, to the act by which I declare that, a certain action being my duty, I ought to perform it, it is clear that such a judgment is never erroneous." There can be no doubt of the advantage of thus limiting the use of the term conscience.

Moral Feelings. — The moral nature embraces feelings as well as positive activities. These feelings are numerous, complex in many cases, and not easily grouped into classes. They are, however, essentially the same as those already described in the study of the sensibilities, with some modifications caused by the influence of ideas of right, obligation, duty, and so forth.

Feelings of Satisfaction and Dissatisfaction.—The earliest feelings of the child, related in any way to conduct and to moral activities, appear to be those of simple satisfaction and dissatisfaction. These, at first, are probably closely connected with mere physical feelings and with the emotions of joyousness and sadness which are largely instinctive. They are more readily observed in the young, but are not confined to any period of life.

When They Arise.—They usually arise in connection with states of mind or with external conduct concerning the propriety and goodness of which the moral perception and judgment have grave doubts. If these doubts are dispelled, and the state or act appears manifestly right, a feeling of satisfaction fills the soul; but if the doubts continue, even though the act or state may not be vigorously con-

demned, a feeling of dissatisfaction and discomfort is sure to be experienced.

Feelings of Approbation and Disapprobation. -These simple and almost instinctive feelings of satisfaction and dissatisfaction naturally and easily change, as the mind matures, into the stronger and more definite feelings of approbation and disapprobation. These feelings are directed both toward one's self and toward others. In the young child they are mingled with the emotions of satisfaction or dissatisfaction which are experienced when he receives the approval or disapproval of the mother or other attendants, and have very little reference to moral considerations. Gradually these feelings become more closely related to states of mind and to conduct, and the child begins consciously to approve or disapprove himself. Later the feelings become clearly defined; and the pursuit of a course of conduct which the judgment fully approves is attended and followed by an agreeable feeling, more or less intense and lasting according to the measure of self-denial involved, or the amount of resolution and effort required. This is a feeling of approbation.

Motives Disapproved, etc. — A careful analysis of one's own states of mind will make it evident that this feeling is directed rather toward the motives by which actions are supposed to be prompted than toward the acts themselves. The soul refuses to approve itself or others for deeds, however good in themselves, which are performed for impure or self-ish reasons.

Need of Control. — The feeling of self-approbation, although natural and proper, needs to be limited and restrained. Otherwise it passes, by almost insensible gradations, into too intense self-gratulation, self-confidence, and even into self-conceit and offensive pride.

Effect of Disobedience to Conscience. - When we refuse to abide by the decisions of the moral judgment and to obey the commands of conscience, we are speedily conscious of a feeling of disapprobation. The intensity of the feeling depends upon the degree of violence done to our convictions of right and duty. Its sharpness is, without doubt, gradually lessened by persistent and long-continued disregard of the conclusions of judgment and the demands of conscience, and by yielding to the solicitations of appetites and passions. Unless the soul does thus become debased and hardened, if wrong-doing continues, disapprobation changes into self-reproach, selfcondemnation, and finally into remorse. This feeling of disapprobation and condemnation goes out toward others whose character and conduct our judgment condemns.

Feelings of Obligation and Duty.—All mature and sane minds are conscious of feeling that some things ought to be done and some other things ought not to be done. That which we ought to do we call duty, and the feeling that we ought to do this we call the feeling of obligation or duty.

This Feeling in the Child.—How early a child begins to experience this state of mind it is impos-

sible to determine with absolute certainty. At first the feeling is very feeble and not clearly defined. It must be preceded by a knowledge of relations and consequent obligations. The strength of the feeling increases slowly, but with greatly varying degrees of rapidity. Its development and growth are much helped or hindered by early education and by surrounding conditions.

Affections and Desire.—All those feelings which have been already described as affections and desires belong also to the moral nature. They spring either from a good or a bad state of mind. They constitute that which we call the heart as distinguished from the intellect. They are the impelling forces which produce right or wrong in human character and conduct. Affection kindles desire; desire moves the will; and the will stirs up the internal activities of the soul and the external activities of the body. It puts the whole man to doing good or evil. It is the center of human character.

Feelings of Moral Beauty and Sublimity.—We discover in the characters and lives of some individuals with whom we are personally acquainted, or of whom we hear or read, certain qualities which we call morally beautiful. We perceive the same qualities in many actions considered apart from the actors. We find ourselves drawn by a natural attraction toward such individuals and such actions, as we are drawn toward a beautiful landscape, a beautiful picture, or any beautiful work of art. An emotion is excited called the feeling of moral beauty.

Characters and Acts Morally Beautiful. — The characters which cause this feeling are usually marked by quiet, unaffected, unostentatious, and apparently unconscious goodness. The acts are expressive of love, pity, kindness, tenderness, and sympathy. There is no exhibition of peculiar power or strength.

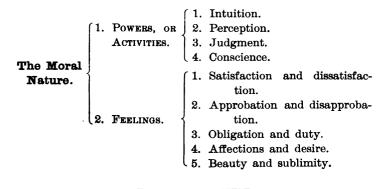
Characters and Acts Morally Sublime.—There are other characters and acts which excite within us a feeling called that of moral sublimity. These characters and acts show goodness combined with great might and energy. We see in them courage and heroism united with tenderness and devotion to right and duty.

Illustrative Examples.—Examples of such characters and deeds are abundant in biographies and histories, and they are not infrequent in the records of common, daily life. The familiar story of "The Good Samaritan" appeals to the feeling of moral beauty. So also do the words and conduct of Sir Philip Sidney when wounded and dying on the battle-field. "Being thirsty with excess of bleeding, he called for drink, which was presently brought him; but as he was putting it to his mouth, he saw a poor soldier carried along, mortally wounded, casting his eyes at the vessel of water; which Sir Philip perceiving, he took the water from his own lips, before tasting, and gave it to the poor man, with these words:—'Thy necessity is greater than mine.'"

The sight or description of a strong, determined man holding steadily on in the pursuit of some grand purpose, or of some imperative duty, never hesitating, never faltering, though surrounded by dangers and, at times, baffled and forced backward by obstacles and disasters, risking the loss of all things, even of life itself, excites the emotion of moral sublimity.

Related to Love of Truth, etc.—The emotion of moral beauty is closely related to the love of truth, goodness, purity, and all excellence, and tends to kindle such love in the soul. The emotion of moral sublimity has a natural kinship to the feelings of respect and reverence for age, for order, for just laws, and for all legitimate authority. For these and other reasons the susceptibility to the emotions of moral beauty and sublimity should be cultivated in the minds of the young.

## SYNOPSIS OF THE MORAL NATURE AND DEFINITIONS.



The Moral Nature includes all the activities and feelings of mind concerned about right and duty.

- Intuition is that activity of mind which gives us the simple, primary idea of right and wrong.
- 3. **Perception** is the activity of mind which enables us to discover immediately the moral qualities of many simple states of mind and external acts.
- Judgment is the activity of mind which examines, compares, and decides all questions and matters of right and wrong.
- 5. Conscience is the activity of mind which insists that the decisions of judgment shall, in all cases, be respected and obeyed; that we shall always do what we believe to be right and duty, and refrain from doing what we believe to be wrong.



•			
		•	
	•		

## CHAPTER XIV.

## ORIGIN AND NATURE OF MORAL LAW.

Obstacles and Difficulties.—Insuperable obstacles have been discovered or imagined in the way of giving instruction in public schools in respect to morals. It has been supposed impossible to separate such instruction from questions of a religious or semi-religious nature. The existence of difficulties is freely admitted, but the demand for such instruction is becoming imperative. The obstacles must be removed, or a path must be found which shuns them. Some familiar illustrations and comparisons may lead toward the discovery of a practical road.

The Judge Decides by the Law.—In a court of justice the judge is guided to his decisions by the provisions of law made by some legitimate authority. He merely explains and applies the law to the cases brought before him. If a case concerns human conduct, he compares the acts alleged to have been done with the provisions of the law applicable to such a case. If the conduct agrees in form and nature with the conduct prescribed by the law he pronounces it right; if it disagrees he declares it wrong.

What Right is. — To be right is to be in harmony with the requirements of the law; to be wrong is to

be out of harmony with these requirements. Right, therefore, as the term is here used, is conformity to law. The conduct of a citizen is right when it is in accord with the laws of the State. The conduct of a member of any organization is right, so far as his relations to that organization are concerned, when it conforms to the rules made for the government of that body. In these cases the term right has no reference to moral character or qualities, but merely to the question of obedience to the law prescribing the conduct proper in such relations.

Right Applied to Acts of Inanimate Things.—
The term right is applied to the actions of animals and of inanimate things with a similar meaning. A clock is said to be right when it indicates correctly the time of day; that is, when it answers the purpose for which it was made. The action of any piece of machinery is pronounced right when the machine does with accuracy the particular work for which it was contrived. The mechanism conforms to law in all its movements.

Regulated Activity Refers to an End.—All regulated activity, whether of men, of animals, or of machines, has reference to the accomplishment of some desired purpose or end. The law of right action is simply adaptability. The law relating to conduct or to action is merely a formal statement of the kind of conduct or action necessary to accomplish the purpose or to secure the end. The laws of a State for the government of its citizens prescribe the conduct necessary on their part to secure the ends for

which the State exists. The rules of any organized body are of the same character. The laws and rules forbid and declare conduct wrong when not so adapted. In the court the judge or the jury examine and compare the conduct of an alleged criminal with reference to this adaptability.

What the Judgment Does.—It was stated in the preceding chapter that the human judgment, when exercised upon moral questions, decides what is right and what is wrong. If the question relates to our conduct, it decides what we ought or ought not to do. After such decision, conscience insists upon absolute and unconditional obedience to it. No excuse or subterfuge is accepted or tolerated. Feelings of self-approval and of pleasure follow obedience; feelings of self-condemnation and of pain follow disobedience.

The Judgment Guided by Some Law. Moral Law. — In rendering its decisions the judgment must be guided by the provisions of some law made by some competent authority for the direction and control of human conduct. This law must be the standard of right conduct in cases where questions of right and wrong are involved, just as the laws of the State constitute a standard of right conduct for its citizens, and the rules of a debating club constitute a standard for the behavior of its members in their conduct while in the society. The moral judgment performs the same duties in the court of conscience as the civil judge does in the court of a State. It ascertains and applies the law "for such

cases made and provided." It does not make the law any more than a judicial officer makes the law which he administers. It finds a law already "made and provided." This law is usually called "the moral law"; and it is the generally accepted standard by which human conduct is to be regulated, and according to which such conduct is judged. By this law the judgment is guided in all its determinations.

Illustrative Example.—When, therefore, my judgment declares some act of mine to be morally right or morally wrong, the decision must be based upon the result of a comparison of this act with the provisions of the moral law prescribing what sort of an act I ought to have done under the given conditions. The conduct has been laid alongside the law, and has been measured and estimated by the requirements of the law. If it satisfies these requisitions it is pronounced right; if it fails to satisfy them it is affirmed to be wrong. An appeal to consciousness will enable us to determine whether such processes of comparison and determination go on within our own minds.

Thoughts, Feelings, etc., Right or Wrong.—Upon careful examination of the activities and states of our minds we discover that we approve and disapprove, pronounce right or wrong, not only our conduct, but also our thoughts, feelings, purposes, and intentions. We perceive an intimate connection between external acts and internal thoughts and feelings. The one seems to be the natural product of the other. We observe even that we often approve

or condemn an action on account of the character of the thought or feeling which appears to have given birth to it. The act is declared good or bad according to the nature of the end for the accomplishment of which it was performed.

Action of Legal Tribunals.—Upon inquiry we learn that even legal tribunals, in seeking to reach conclusions as to the innocence or guilt of persons charged with criminal conduct, go beyond the acts themselves and take into consideration the real or probable intentions with which the acts were committed. If it can be satisfactorily shown that, in a given case, good was intended, though harm was really done, the legal character of the act is very essentially modified in the eyes of the administrators of the law. In such a case the moral character of the act may be entirely changed, although, in a purely legal aspect, it still remains a violation of the letter of the law, and renders the doer liable to a legal penalty.

Dealing with Children. — We observe further that parents, teachers, and others in charge of children, are influenced by the same considerations in judging of the conduct of those under their care. They allow the apparent and probable intentions of a child to have much weight in determining the merit or demerit of particular acts as well as of general courses of behavior.

Character and Scope of Moral Law.—These illustrations and examples help us to discover the general character and scope of so-called moral law.

Like all other laws, it has reference to ends to be attained. Civil law aims to make good citizens and thus to secure the highest good of the State. Moral law aims to make men and women morally good, and thus to secure the highest good of mankind. It requires such external conduct and such a state of mind as will result in the highest good to the individual, and consequently in the highest good to the race as a whole.

Moral Law Every-where Recognized.—It seems abundantly evident by our references to consciousness, to legal tribunals, and to the conduct of men generally, that moral law is every-where recognized, and is every-where regarded as of binding force. Reference will be made in another place to the reasons for minor differences of interpretation and application of the law, while there is substantial agreement as to its essential character and its important requirements.

Evidence of Authority Asked.—When required by some person, who professes to be clothed with authority, to do or not to do certain things, to conduct ourselves in a particular way and not to conduct ourselves in another way, we are naturally impelled to require evidence that his authority is legitimate. We ask for the source of his authority, the origin of his claim of a right to demand obedience of us. We do this in civil affairs, and the officers of government are bound to answer our demands. They refer us to the law under which they are acting, and point out the special provisions which justify

their requisitions. Their appeal is to statute or municipal enactments.

Authority for Making Laws Demanded. — We may go a step further now in our inquiries and demands. We may ask by what authority and by what right such specific laws have been enacted. We may deny the validity and the binding force of the laws. This is often done. In this case we are answered by reference to what are called the fundamental laws of the State or country, the constitution so-called. It is shown that these authorize the enactment of the particular regulations in question.

Still Another Demand.—It is possible for us to go still further, and inquire for the origin of these fundamental principles of government. If told that they were "ordained and established" by the people, we may demand to know by what authority the people so ordained, and whence they derived this authority. This in substance is an inquiry as to the origin of government itself. To this final inquiry different answers will be made; but they will all affirm, with equal positiveness, the validity, the rightfulness, of human government.

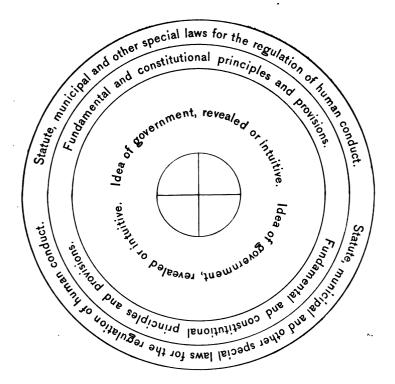
First Reply—Necessity.—We shall be told by some that the experience of mankind through all the past ages has proved, beyond the possibility of question, the absolute necessity of some form of government; that society can not exist without government; that without it life would be intolerable, and the condition of men little above, or better than, that of wild animals. This answer justifies the existence of government upon the ground of necessity, and from such necessity there is no appeal. The averments of this reply are true, whether this basis of government be accepted or not.

Second Reply — Intuitions of the Mind. — We shall be told by others that the idea of government is one of the intuitions of the human soul, like the idea of time and space and cause and effect; that the human mind is so constituted that whenever a considerable number of human beings are, by any cause, congregated, they immediately organize some sort of a government; and that this is done without reference to the teachings of experience or to the plea of necessity. This answer makes the ultimate basis of government the native intuitions of the mind. To many this reply is entirely satisfactory.

Third Reply — Divine Authority. — We shall be told by others that human government has its basis in the will and authority of the Supreme Ruler of all things; that government is ordained of God and established by His direction; that He has made a revelation of His will in this respect to the human race; that this revelation is contained in His Word, and is also made known through the intuitions of the soul. This reply may be said to include all that is essential in the second, but the second alone does not necessarily involve the acceptance of the doctrine or belief in the existence of a personal Supreme Ruler. This last reply will be accepted by most of those who believe in a Divine revelation.

Illustrative Diagram. — The origin and develop-

ment of civil government and of specific laws may be illustrated by the following diagram.



Relations.—Fundamental and constitutional principles have their basis in the revealed or intuitive idea of government. Out of these fundamental principles grow all special laws. Civil law may rightfully claim obedience from me. In yielding myself to its demands, I am obeying the authority of necessity, of the intuitions of our common humanity, and of the Supreme Ruler of all things.

Inquiries as to Moral Law. — The same inquiries may be made in respect to moral law and its demands. A child is directed to do certain things because it is right that he should do them; he is forbidden to do certain other things because it is wrong for him to do them. He is required to tell the truth, to be honest, to obey his parents, because these things are right; he is told not to lie, not to steal, not to cheat his companions, not to disobey his parents, because such acts are wrong. The child may ask why it is right to do some of these acts, and wrong to do others; why he ought to do these and ought not to do those. The answer may be that it is the wish and will of his parents, of his teachers, and of others who are older and wiser than he, or that it is the command of God. The child is perhaps satisfied, for the time, and presses his inquiries no further. At this period of his mental and moral development he knows no authority higher than that of the mother or father or teacher. He has no thought of the possibility of appealing to any power beyond, or of asking by what authority they impose these commands and these limitations upon his conduct.

Further Inquiries.—The child, grown older, proceeds to put further questions. He asks for reasons other than the mere assertions of the person who utters the command or the restriction. He demands to know why it is wrong to lie, to steal, to deal dishonestly; and why it is right to tell the truth, to act justly and honorably in the various relations of

social and business life. He inquires for the origin of the distinction between right and wrong so-called; and for the basis upon which these rules, commands, and prohibitions, in respect to conduct rest. In other words, he asks for the source from which the detailed requirements and provisions of the moral law are derived, and what gives force to these provisions and makes them binding upon him. This question is of the same nature as that asked in respect to the authority of statute and municipal enactments, and essentially the same reply must be made.

Derivation of Special Rules.—The special provisions, the specific requirements, of the moral law are derived from what may properly be called fundamental and constitutional principles of justice and righteousness, the underlying principles out of which all rules for human conduct are drawn, just as statute laws are derived from the constitution of the State. Specific regulations for conduct are binding only as they are in accord with these foundation principles. They are to be tested by these as the enactments of the legislature are tested by an appeal to the constitution.

A Final Inquiry.—Assuming the existence of such fundamental moral principles, we proceed to inquire concerning their origin, and their general nature. The question is really as to the existence of moral government, its source, and its character. Various answers have been made to the substance of these questions, but no reply will be accepted as satisfactory by all inquirers.

First Reply. — We are told, in substance, by some philosophers that these so-called fundamental principles are formulated conclusions, definite statements, derived from the teachings of the experience of the human race during the ages of the past. The physical and mental constitutions, the instincts, wants, and tendencies of men show that they were designed to live together. They are capable of sustaining various relations to each other, some of these very intimate and productive of much happiness or of great misery according to the conduct of the parties to the relations. It appears evident that the intercourse between men is intended to be productive of good both to individuals and to the whole body. Experience has proved that this result can be secured only when the conduct, the manner of living and behaving, is of a certain kind. It has been discovered that some things must be done and others must not be done in order that life may be even tolerable, and that domestic and social relations may be maintained. It has been found absolutely necessary that people should tell the truth, should be honest and upright in business and other transactions, should respect the property, the persons, the reputations, and the interests of others; that they should not commit theft, robbery, murder, nor do violence nor injustice to any one. It has been discovered that it is of the highest importance in the domestic relations that parents care properly for their children, feeding, clothing, protecting, and educating them; and that in turn children be obedient and respectful

to their parents and to other older persons. These and many other things of similar nature having been found by long experience and much observation to be essential to the good order, the comfort. convenience, and happiness of mankind, came to be considered and called right, and things of an opposite character came to be regarded and called wrong. Statements were finally formulated, embodying these ideas and conclusions, and were called general or fundamental principles of moral law and of right conduct. Gradually these came to be accepted as axiomatic truths, and to be considered as imperatively binding upon all men. Deductions and inferences from these constitute the specific rules for the regulation of conduct in all the various and complicated relations of life.

A Second Reply.—Another reply to our inquiry is that these general and fundamental principles of morals are expressions of the will of God, revealed in His Word, and perhaps by other means, to mankind; that they are true because they are His commands, and are to be received and obeyed for the same reason. This statement of the origin of moral law is accepted by many as the briefest and most satisfactory that can be given. Like the preceding one, it is open to very serious objections unless accompanied by careful and full explanations.

Another Answer — Idea of Right. — Another answer is, in substance, that the idea of moral right and wrong is one of the intuitions of the mind. Like the idea of civil government, it springs up in the

soul when it is needed, and serves as a basis upon which the principles of morals and duty may rest. It is the deep foundation upon which the whole superstructure of theoretical and practical morals is built. The idea exists in the mind long before experience and observation have taught the necessity of moral law for the good and protection of society, and before the doctrine of a revelation from a moral Governor can be comprehended. It manifests itself at an early period in the life of the child, and is found among people of all degrees of development and culture. Every man is conscious of the presence of this idea in his own mind.

Fundamental Principles.—In addition to this intuitive idea of a distinction between right and wrong, there are certain fundamental truths, or principles of justice, righteousness, beneficence, and mercy, so nearly intuitive and axiomatic that they commend themselves at once to the judgment, and are accepted as practically beyond doubt or question. The mind rests upon them as upon an immovable foundation. They occupy the same position in the system of moral government that the constitution occupies in our system of civil government. From them are deduced and inferred all needed specific rules for human conduct.

Nature of these Principles.—These principles are universal, unchangeable, eternal truths, commending themselves to the "general consciousness" of the race. The existence of such principles is generally admitted, though different views are entertained as

to their origin. Those who believe in a Supreme Moral Ruler find them embodied in His character, and speak of Him as personified righteousness and justice. They find an expression of these principles in His revelation of Himself and His will, both in His Word and in the intuitions of the soul.

The Believer in Revelation.—The intelligent believer in God and in revelation does not believe these principles to be truths simply because they are revealed. He believes they are revealed because they are truths. He accepts them as truths, not simply because he believes God has spoken them; but he believes God has spoken them because they are true. They are true, as mathematical and other axioms are true, because the contrary is inconceivable as the mind and the moral nature are constituted.

Not Easy to Express these Truths in Words.—
It is not easy to embody these principles fully in words. They are better conceived than expressed. Like other intuitive truths, they are known in their completeness only in consciousness. "The Declaration of Independence" makes an effort to express some fragments of them when it affirms: "We hold these truths to be self-evident, that all men are created equal; that they are endowed by their Creator with certain inalienable rights; that among these are life, liberty, and the pursuit of happiness." The existence of self-evident truths, relating to the rights and duties of men, is here recognized and affirmed. The primary truth here expressed is that of justice;

that to every man should be given that which is his due. The Roman declared it to be "the unchanging, everlasting will to give each man his right." This is undoubtedly the first of the intuitive, fundamental moral principles. It is accepted without hesitation by all men, even though they may daily do violence to its teachings,

Words of the Great Teacher.—A Greater than the author of the Declaration expressed the substance of the law of justice more simply and more beautifully when He said, "All things whatsoever ye would that men should do to you, do ye even so to them." The same Great Teacher epitomized the whole moral law in the declaration, "Thou shalt love the Lord thy God with all thy heart, and with all thy mind, and thou shalt love thy neighbor as thyself."

Fundamental Principles.—The fundamental principles of morality include (1) the law of justice, to render to every man his right, or that which he can justly claim; (2) the law of beneficence, to do good to all men, especially to those in need, as we are able and have opportunity; and (3) the law of mercy and forgiveness, to do to the erring and those who have wronged us as we would that they, under like circumstances, should do unto us. It is difficult to conceive of any objections which can be urged against these principles. They are taught by revelation; they are approved by the judgment of all men; and they are in harmony with the teachings of experience. Those who reject revelation must

accept them on the ground of utility, if for no higher reason.

Harmony between Revelation and Utility.—There can be no doubt that the teachings of revelution and of real utility harmonize when both are rightly understood and correctly interpreted; and they will also agree with the native intuitions of the mind. We have in these accepted principles a sound and safe basis for all needed moral instruction and training in the schools.

Practical Rules Deduced.—From these principles practical rules may readily be deduced for the regulation of the conduct of children in the home, in the school, and in all other places; for the conduct of parents toward their children; of all members of a family toward each other; for the conduct of friends and neighbors; for conduct in matters of business and pleasure; for the conduct of employers and those employed; of citizens, of public officers, and finally, of men in all possible conditions and relations.

Differences of Opinion, etc. — Some differences of opinion and of practice are found even among good men in respect to the interpretation and application of laws of conduct. Things are approved by some which are condemned by others; things are regarded as morally indifferent by some which are considered morally wrong by others. It will be discovered on examination that such differences relate to matters of minor importance, and usually to things supposed to be enjoined or forbidden by obligations of a relig-

ious character which have been assumed. The differences affect none of the essentials of private or public morality. In respect to these there is entire agreement, and these only should be included in the instruction given in the schools.

Influence of Early Education.—The influence of carly education is observable in the opinions of men upon all matters of every-day life, and especially upon the moral character of many customs and habits of society, such as forms of recreation and amusement. These, in many cases apparently morally indifferent in themselves, must be approved or disapproved according to their general effects upon character and conduct, and their natural association with other things positively and obviously good or bad. Things, like men, are estimated by "the company they keep," and the direction in which they lead.

Instruction can be Given.—Avoiding unessential matters concerning which differences exist, and taking into account the influence of early education and environment, the instructor will encounter no serious obstacles in teaching and enforcing the fundamental laws of morals in all their important applications. He may safely insist upon obedience to rightful authority in the family, in the school, and in the State. Such obedience may be enforced by the sanctions of revelation, of the "common sense" of mankind, and of utility in the best sense of the word.

The duties of truthfulness, honesty, integrity, and

purity of thought, of feeling, and of speech may be enforced by the same sanctions.

Regard for the rights of others in respect to liberty, reputation, property, and "the pursuit of happiness" can also be taught. All these are included in the great law of justice.

Duties imposed by the laws of beneficence and of mercy and forgiveness can be illustrated and insisted on without danger of giving just cause of offense to even the most sensitive natures. Benevolence, charity, kindness, pity, compassion, and other modes of manifesting good-will are approved by revelation and by the judgment of all men.

These examples indicate with sufficient clearness the general character and scope which instruction in morals should have in the schools. The detail of methods does not fall within the limits of our present purpose. Such details will readily suggest themselves to an intelligent teacher.

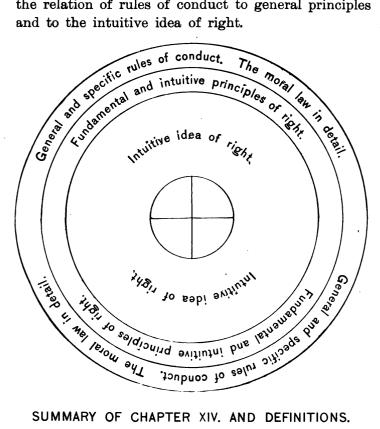
An Explanation—Uses of Term "Right."—A single point may require a word of explanation to prevent confusion of ideas, and consequent confusion in instruction. Right has been defined as conformity to law, and rule. Another use of "right" and "rights" must be distinguished from this. Rights are claims made in accordance with laws of nature, of society, or of the State to possession, use, and enjoyment of things. So we speak of natural rights, social rights, civil and political rights. In this sense it is said men have a right to life and liberty. Whatever things another may justly claim from me are his

by right; his claim is made in harmony with some law. Some rights are determined by the law of justice; others by the law of beneficence, and still others by the laws of mercy and forgiveness.

Duty.—Duty is that which we ought to do; that which we owe under the demands of some law. Generally rights and duties are correlative; so far as the law of justice extends they are completely correlative. Under the laws of beneficence and mercy, duties go very far beyond rights. Whatever another has a right to claim of me it is my duty to grant him; whatever I can rightfully claim of him it is his duty to give me. So much evidently falls under the law of justice.

Illustration. — For example, I owe a sum of money to another; under the law of justice he can claim the payment of the sum in full, with proper compensation for its use. I meet the demands of duty, so far as simple justice is concerned, when I make such payment. He can claim nothing more. But suppose this man is in sore and pressing need of something which I have and which I can spare without serious detriment, or that his family is suffering for things which I can easily furnish, it is without doubt my duty, under the laws of beneficence and mercy, to give him these things, even though he may have no right to claim or demand them of me by the law of justice. It is important that the distinction between rights and duties under the law of justice and under what may be called the higher laws be made clear in giving instruction to the young. In one case the rights and duties are legal as well as moral; in the other, they are moral only.

Diagram. — The diagram previously used will illustrate the origin and development of moral law, and the relation of rules of conduct to general principles and to the intuitive idea of right.



## SUMMARY OF CHAPTER XIV. AND DEFINITIONS.

- 1. Obstacles in the way of moral instruction in the schools.
- 2. Illustration of the office of judgment by reference to the judge in a court.
- 3. What right is in the general use of the term,

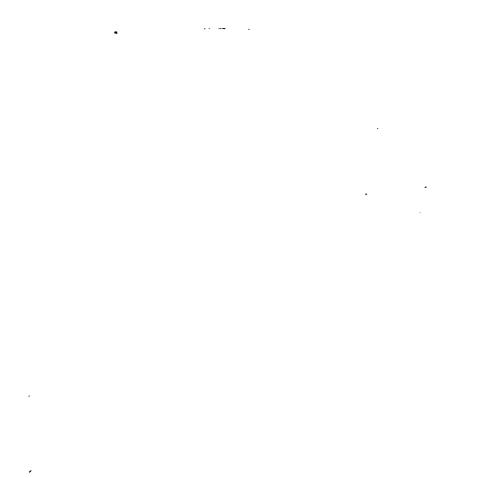
- 4. Term right applied to the action of inanimate things.
- 5. All regulated activity has reference to an end.
- 6. The office of judgment. Guided by law.
- 7. Decision in a case involving conduct.
- 8. Appeal to consciousness shows that judgment goes beyond the outward act.
- 9. Legal tribunals and parents do the same.
- 10. General character and scope of moral law.
- 11. Such law recognized every-where.
- 12. Inquiries made when obedience is demanded.
- 13. The three successive inquiries.
- 14. The three replies, and conclusions.
- 15. Relations shown by the diagram.
- 16. Inquiry as to right, etc., by a child.
- 17. Further inquiries by a child matured.
- 18. Final inquiry as to origin of moral law.
- 19. Replies in their order.
- 20. Idea of right. Fundamental principles.
- 21. Can be accepted by all.
- 22. Difficulty of expressing these principles.
- 23. Declaration of Independence. The Great Teacher.
- 24. Substance of these principles. Justice, beneficence, mercy and forgiveness.
- 25. Revelation and utility in accord.
- 26. Rules of conduct from general principles.
- 27. Differences of view as to minor matters.
- 28. Caused by differences in early education.
- 29. No serious hindrances to instruction.
- 30. Some topics for instruction.
- 31. Explanation of terms right and rights.
- 32. Duty. Its relation to rights. Illustration.
- 33. Illustrative diagram.

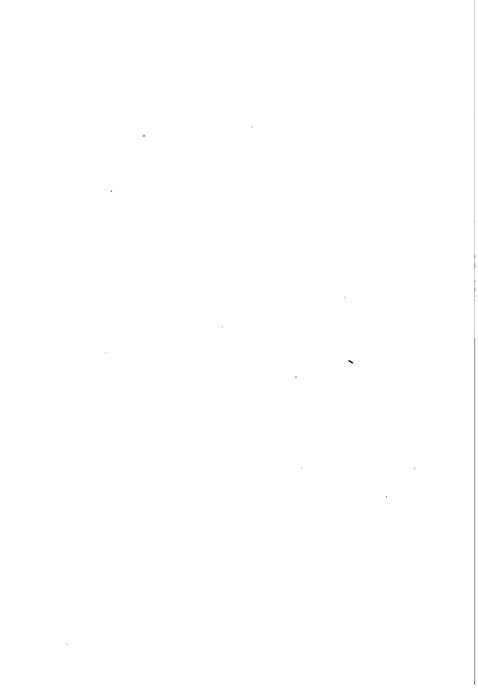
Right.—Conformity to law. Adaptability.

Rights.—Claims to whatever one may justly have, enjoy, etc

Moral Law.—Rules for the conduct of moral beings.

Duty.—What one ought to do. That which is owed.





## CHAPTER XV.

#### SOME CONDITIONS OF EFFECTIVE MENTAL WORK.

Body and Mind Closely Connected.—The intimate connection between the body and the mind has already been described. This connection is such that the condition of the body determines, to a very great extent, the character of the mental activity at any given time. If the body is full of vigor and energy, the mind is usually vigorous also. If the body is sluggish, the mind is generally in the same state. An acute attack of any serious disease makes mental labor impossible. Chronic disorders, such as dyspepsia, affect the general tone of the mind, and frequently give a peculiar coloring to all mental productions.

Influence of the Condition of the Nervous System.—The state of the nervous system has a very marked influence upon mental action. If this system is in a peculiarly excited and irritable condition, the mind is likely to exhibit a large degree of excitement and irritability, which renders productive mental effort exceedingly difficult, and tests severely the power of self-control. Study, under these conditions, involves a large expenditure of both physical and psychical energy and yields only very meager returns. The cost is altogether too much for the

profit. It is the part of wisdom to "put into port for repairs" rather than to attempt to sail with disabled machinery.

No Need to Despair.—Yet no genuine student will sit down in despair on account of temporary disability of body, or even of a considerable degree of chronic or constitutional weakness. Many men have accomplished much mental labor, and have achieved great literary and scientific successes, with weak physical powers, and while laboring under severe bodily suffering. Such men have possessed great strength of will and an unlimited supply of patience and perseverance.

Effect of Attending to Pains and Discomforts. -By an easily understood law of mind, pain and discomfort become more troublesome and apparently more intense if attention is constantly directed to them or to their real or supposed causes. If one anticipates discomfort from indigestion after dinner, and waits and watches for it, he will be pretty certain to find it. Many a man makes his life wretched, and unfits himself for any effective work, either physical or mental, by the habit of expecting the appearance of his ailments and bestowing all his time and attention upon them. Like some other unwelcome visitants, they are best got rid of by ignoring their presence. Treated with wholesome neglect, they cease to force themselves upon us. No effective study can be done if the student is thinking of some pain which he is suffering or expects to suffer presently.

Conditions of Bodily Health.—The conditions of bodily health are generally well understood. A proper amount of whólesome and nutritious food must be taken at regular times. The food should be well cooked, and served and eaten in a civilized way. Violent physical exercise should not immediately follow a hearty meal, nor should any severe mental labor be entered upon at that time. The nervous energy is needed for the processes of digestion.

Sleep, Exercise, Repose. — Provision must be made for a sufficient amount of sleep and for appropriate exercise. The student can secure no real and permanent advantage by shortening the hours of sleep and lengthening the hours of study. The apparent temporary gain will be more than offset by the ultimate and real loss of mental energy and effectiveness. Nor will he find profit by attempting to steal for study time which belongs to physical exercise and to out-of-door recreations and sports? Mental labor must be relieved by periods of repose and relaxation in order to be most productive.

Division of Time.—Mental productiveness will be increased also by making a systematic division of time. A student should determine as accurately as possible the proportion of time to be given to each subject of study and to every other employment, and should hold himself to this arrangement with a good degree of persistency. More work can be done by such regularity, and the expenditure of strength is less than it is when labor is performed in a random manner and by spasmodic efforts.

A Definite Purpose.—An essential condition of fruitful labor is a clearly defined purpose kept steadily in view. Much energy is wasted because it is undirected, or directed now this way and now that, expending itself uselessly, making, it may be, a prodigious noise, but leaving no permanent results. A scholar may study a little of this branch, and a little of another, and something of still others, and accomplish nothing worthy of record simply because there has been no concentration of effort. A wide extent of surface has been skimmed over, but the soil has not been stirred deeply enough to yield even a scanty harvest. While the mind needs and craves variety, it is important to guard against mental dissipation, and against the present tendency to include too many subjects in a course of instruction limited in time.

Subjection to the Will.—Another condition is the complete subjection of all the energies and activities of the mind to the control of the will. Until this has been accomplished the man is not master of himself nor of his own powers. The will is designed to be the regal power, the dominant energy, of the soul. One prominent purpose in education is to enthrone this natural king and to bring all the other activities to work harmoniously, cheerfully, and readily under his direction. Then action becomes altogether voluntary, and the whole energy of the mind may be concentrated at pleasure, and held steadily upon any selected form or object of labor. The difficulty of controlling the mental activity is a matter of expe-

rience with most young pupils, and occasionally with students engaged in advanced studies. They attempt and abandon in turn half a dozen lessons, or a half score topics for an essay, in consequence of the disorderly state of mind produced by the revolt of the perceptive, the representative, or the thinking powers against the authority of the will. The soul is in a condition of anarchy, and no productive effort can be put forth. This naturally brings us to the fundamental condition of effective mental activity, attention. Its importance is such as to justify an attempt to understand its nature, and something of the means by which one becomes able to command or to give it.

Definition.—Attention is that state of mind in which its energy and activity are concentrated upon a particular object of observation or of thought. This concentration may be either voluntary or non-voluntary. To command the attention of another is to cause his mind to be brought into this condition. To give attention is to bring one's own mind into this condition.

Not a Distinct Power.—Attention is not a distinct power of the mind, nor a specific mode of mental action, like perception, or representation, or imagination. Any activity of the mind intensified and concentrated upon some object involves that condition which we call attention.

The Word Itself.—The word attention itself indicates that the mind, to borrow a term applied to objects of sense, is in a state of tension, of more or

less excitement, and is stretching itself toward something with eager interest.

External Attention. — The attention may be directed to external objects. In this case the perceptive activity is in an excited state, and exerts itself through some one or more of the organs of sense. We may be intent in watching or examining an object of sight; we may listen intently to catch some sound; we may seek eagerly to detect the peculiar character of some odor or flavor. The appearance and posture of the body frequently indicate the greater or less degree of concentration of mind upon objects of sense-perception. The whole body may be bent forward; the head may be turned and inclined; the neck may be stretched to its full length; the eyes may be wide open and fixed, and even the mouth may be unconsciously opened. The entire nervous and muscular systems are highly excited.

Internal Attention.—The attention may be directed inward. In this case the mind is absorbed and occupied by processes of thought, or in the examination and analysis of these processes. When internal attention becomes exceedingly intense, so that ordinary impressions upon the senses are unnoticed, a person is said to be absent-minded or in a state of abstraction. The eyes may be opened without seeing and the ears without hearing, and even the sense of feeling seems to be lost for the time. Amusing examples are given of such complete absorption in study or meditation. Newton sometimes forgot the hour and the need of his

dinner, and it is said that men have forgotten to attend their own weddings.

Attention Produced by Stimuli, etc.—This direction and concentration of mental activity, called attention, is produced by allurements, incitements, or stimuli of some kind acting upon the mind. The attention is said to be caught, to be arrested, to be fastened, to be commanded. The meaning is that some enticement or stimulus has presented itself or has been presented to the mind. It may have appeared by accident, or by the purpose and design of some individual, or the mind may have intentionally and voluntarily sought for it and yielded itself to its power.

External Stimuli.— These enticements are either external or internal. The external are the characteristics and qualities of objects and acts which strongly impress and excite the senses. A very bright light, a brilliant color, some strange peculiarity of form or movement, an unusual stir of any sort, lay hold, so to speak, upon the sense of sight and compel attention. A loud noise, a peculiar combination of sounds, an unexpected burst of song or of musical instruments, a clap of thunder, strike upon the ear and arrest attention. Among the external stimuli are all the various devices of parents, teachers, and others, employed to attract, hold, divert, and occupy the attention of young children.

Internal Stimuli.—Internal stimuli include all things which appeal to the representative and thinking powers, and those which excite the feel-

ings through these powers. The mental representations of the pleasures and advantages resulting from the acquisition of knowledge stimulate the student and fix attention upon the subjects of study. The real or imagined enjoyment supposed to follow the possession of wealth, or power, or influence of any nature, constitutes a strong allurement to many minds, and concentrates attention upon the means necessary to attain these. The pleasure springing out of the mere exercise of any form of mental activity, when the exercise is proper in degree and amount, is a constant stimulus to attention. Affection for parents, love of friends, desire of approval are so many internal stimuli to the young pupil. The most effective internal, as well as external, stimuli vary with age, with habits, and with degrees of development and culture. Attention is most especially allured by what is called interest. This is only a degree of emotion, either pleasurable or painful, not so intense as to interfere with the regular action of the knowing activities or, in case of mature minds, with the directive power of the will. Usually an agreeable emotion is meant when we speak of being interested.

Natural Stimuli. — Stimuli to attention, like stimuli to appetite, or to physical or mental exertion of any sort, may be natural, agreeable, and wholesome, or they may be unnatural, disagreeable, and unwholesome in their ultimate effect. Natural stimuli allure and entice the attention, lay hold upon it with a gentle grasp and produce no sudden and

violent movements. The mind is not forced and dragged along like an unwilling and struggling animal, or like a resisting child. The activity excited is steady and grows in intensity. The interest and the attention reach their highest pitch by gradual increments and not by a single unnatural and painful effort. Among such stimuli are the forms, features, qualities, and characteristics of external objects properly presented, and also customary acts, movements, modes of address and management. Of this kind are the pleasurable feelings of the soul, the emotions, affections, and desires when not unduly excited; and, indeed, all forms of mental activity within proper limits.

Unnatural Stimuli.—Among the unnatural and usually harmful stimuli are all harsh and violent incitements; strange and frightful objects suddenly presented, strange sights, sounds, and actions; so also are the uncouth, senseless, and almost barbarous devices sometimes resorted to by unskillful teachers and sensational orators.

Effect of Violent Stimuli.—Such violent stimuli compel attention for the moment. They produce, for a short time, an intense but painful and exhausting concentration and activity of mind, followed of necessity by weariness, weakness, and disgust. The frequent use of stimuli of this character renders the mind insensible to the influence of milder and more healthful incitements, just as artificial stimulants and highly seasoned food destroy the relish for plain diet and wholesome cooking. The natural appetite

is destroyed in both cases. Children accustomed to the government of objurgations and blows soon become deaf to requirements expressed in quiet tones and mild words. So pupils whose attention is demanded by loud and angry talking, by violent gesticulations, by rappings with a ferule, and stampings of the foot, become blind and deaf to all natural and proper stimuli.

Two Kinds of Attention. — Two varieties of attention should be distinguished, the reflex or non-voluntury and the voluntary or volitional. Hamilton, with his usual acuteness of analysis, makes three varieties.

Hamilton.—He says: "I am persuaded that we are frequently determined to an act of attention, as to many other acts, independently of our free and deliberate volition. Attention is of three degrees or kinds. The first is a mere vital and irresistible act; the second, an act determined by desire, which, though involuntary, may be resisted by our will; the third, an act determined by a deliberate volition."

Sully.—Mr. Sully remarks: "When the mind is acted upon by the mere force of the object presented, the act of attention is said to be non-voluntary. It may also be called reflex (or automatic) because it has a striking analogy to reflex movement, that is to say, movement following sensory stimulation without the intervention of a conscious purpose. On the other hand, when we attend to a thing under the impulse of a desire, such as curiosity or a wish to know about a thing, we are said to do so by an act

of will or voluntarily. These two modes of attention are very properly distinguished. In early life non-voluntary attention is predominant; in later life, voluntary attention."

Carpenter. — Dr. Carpenter says: "Attention may be either volitional or automatic; that is, it may be either intentionally induced by an act of the will, or it may be produced unintentionally by the powerful attraction which the object, whether external or internal, has for the eye."

Importance of the Distinction. — In the training of childhood, and in personal efforts to bring the mental activities under the control of the will, it is of much importance to keep in mind the essential difference between non-voluntary and voluntary attention. Non-voluntary or reflex attention is the only kind of which the very young child is capable. Even at the age of entering school the attention is mostly of this sort. Injustice will be done if that is demanded of which the pupil is incapable, and discouraging failure will result from efforts to secure that which, for the time, is unattainable. The progress from the state of reflex to that of voluntary attention is very gradual. Judicious training and reasonable demands will hasten the progress, while unwise treatment and unreasonable demands will retard it.

Physical Condition.—In demands upon attention, more particularly in case of children, regard must be had for the physical condition. Intense concentration of mental activity taxes directly and severely the

energy of the nervous system and, to some extent, the muscular system also. If the body has become greatly fatigued, continuous attention can be given only in answer to the excitement produced by violent stimuli, or in forced and painful obedience to the imperative demands of the will; the effort to give attention is irritating and exhausting, and to require it is hardly less than cruelty.

Mental Condition.—Great mental fatigue and exhaustion render effective attention absolutely impossible. Under such conditions the student can not afford to make heavy requisitions upon himself, nor can a teacher afford to make them upon pupils. The expenditure of vital and psychical force is too great for the meager returns secured. Work which calls for much concentration of mental activity and for close and protracted attention, should be undertaken at that period in the day when both body and mind are most fresh and vigorous.

Influence of Surroundings.—The power to secure attention of others or to give attention one's self is very greatly affected by the immediate surroundings. While this is especially observable in the case of children, even scholars of considerable maturity and culture are conscious of the influence of environment in this respect. Any thing unusual in the room or about the house distracts the attention. Familiarity with the place, with the furniture and its arrangement, with the tables, books, papers, and other articles used in the preparation of lessons, or in the prosecution of any form of literary or scientific labor,

contributes to increase the power of attention. An approach is made here to the domain of habit.

Influence of Association. — The ordinary influence of environment is greatly increased by the power of association in giving direction to mental activity. If the associations are in harmony with the objects of observation or thought to which the attention is solicited, they are valuable and effective aids in producing perfect concentration of mental energy. A room set apart for study, pleasantly associated with books, lessons, teachers, and instruction; with quietness, good order, agreeable companions, and industry in literary pursuits, makes attention easy. On the other hand, a building or room associated with enticing games and sports, with exciting representations of any kind, with musical or theatrical entertainments, or with any thing peculiarly attractive and out of harmony with books, study, and school work generally, renders it difficult to fix attention upon lessons, or any kind of mental labor. The surroundings, the associations, and the occupation must be in accord in order that attention may be had without painful effort, and that mental activity may be most fruitful.

Limitation of Time.—Very vigorous activity of either body or mind can be kept up for only a limited time. The more intense and absorbing the action, the shorter its duration. Consequently attention, being merely some form of mental activity concentrated and highly intensified, is subject to the same general law. The attention of a young child should

be demanded for only a very brief period. Let it be made as complete as possible while it is held, and let it be followed by a period of relaxation and repose.

As age increases, and habit begins to exert its power and lend its assistance, the periods of tension may be gradually lengthened, and those of rest may become shorter and less frequent. The child should be taught and trained to study with the utmost possible vigor during the times of study. Great care must be taken to save pupils from falling into the habit of "dawdling" over books and lessons. Nothing is more fatal, to real scholarship or to effective work, than this habit, into which children are sometimes driven by unreasonable demands, and by unwise methods of training.

Illustration of a Microscope.—A microscope with an object glass of high power so concentrates the light as to bring out with great distinctness even the most minute features of that part of the object within the field of view. But the field is very limited. The work done is most thorough and effective, but it is confined to a narrow space. A glass of less power allows the eye to traverse a wider field, but the resulting knowledge lacks in definiteness and completeness.

Effects of Concentration.—Attention is the microscope of the mental eye. Its power may be high or low; its field of view narrow or broad. When high power is used attention is confined within very circumscribed limits, but its action is exceedingly intense and absorbing. It sees but few things, but

those few are observed "through and through" and thoroughly learned. The resulting knowledge is perfectly clear, sharply defined, and available for use. Mental energy and activity, whether of perception or of thought, thus concentrated, act like the sun's rays concentrated by the burning glass. The object is illumined, heated, set on fire. Impressions are so deep that they can never be effaced. Attention of this sort is the prime condition of the most effective and most productive mental labor.

Condition of Memory.—Attention is also the most essential subjective condition of retention and reproduction. Attention and memory are inseparably connected. Things are forgotten because no real attention was bestowed upon the process of learning. Mechanical repetition is often relied on to supply the place of genuine concentration of mental activity. Repetition is necessary, especially for young students, and is of great value in many cases, but it can never be made a substitute for attention. The one merely penetrates through the surface, the other pierces to the heart of things.

Can Attention be Given to More than One Thing at the Same Time?—This is an old question, and has been much and eagerly discussed. It is a subject of theoretical interest, and is worthy of thought and investigation, but it is not of great practical importance. This is certain: We compare objects. We place them side by side before the senses, or by the power of representation we place them thus in the mind. We say this is like

or unlike that. It is difficult to understand how a comparison can be made unless the two objects or the mental representations of the objects are before the mind's eye at the same moment.

Possible Explanation. — It is possible that this old problem has its solution in the well-known fact of the persistence or continuance of impressions upon the senses and upon the mind. Sensations produced by impressions upon the nerves of sight, hearing, or taste, persist for an appreciable length of time after the exciting causes have ceased to act. Why may not this be true of the products of other forms of mental activity? For example, I am comparing two objects placed before me. I am unable to look intently upon both objects at the same instant. The attention is directed in turn to one and then to the other. The change from one to the other may be said to be instantaneous; nevertheless it occupies an appreciable portion of time. Is it not altogether beyond doubt that the percept of the one object persists on the retina and in the mind until the percept of the other is formed? In this case the second percept is superimposed, so to speak, upon the first, and the two are thus brought into the most favorable position for comparison. The same may be true of the mental products, the images, of two successive acts of representation. It may also be true when one of the mental products is an image or a concept and the other a percept.

Importance of Attention. — A writer says: "The difference between an ordinary mind and the mind

of a Newton, consists principally in this, that the one is capable of the application of a more continuous attention than the other."

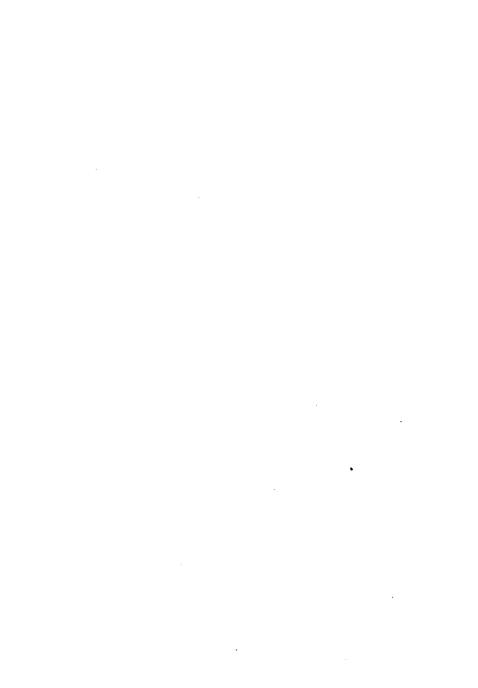
Newton himself said, "if he had made any discoveries, it was owing more to patient attention than to any other talent." Genius has been called "a continued attention," and also "a protracted patience." Chesterfield affirmed that "the power of applying an attention, steady and undissipated, to a single object, is the sure mark of a superior genius."

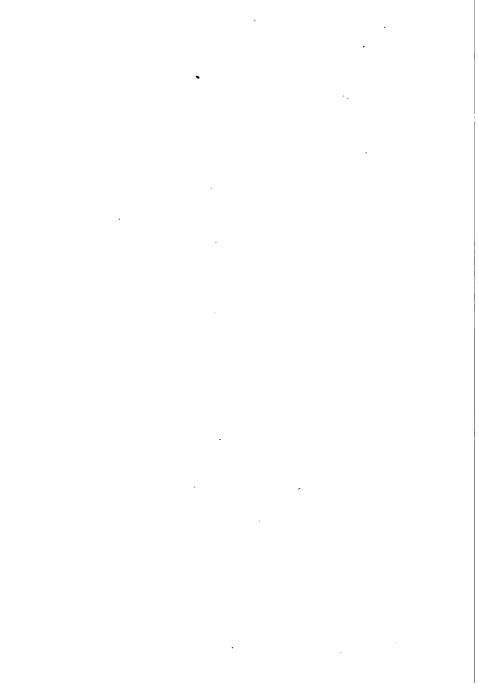
While differences in native mental power count for much in efforts for intellectual mastery, it is still true that any student, with industry and a fixed habit of genuine attention, can command success in almost any department of study. Without continuous attention the greatest genius is doomed to certain and ignominious failure.

## SUMMARY OF CHAPTER XV. AND DEFINITIONS.

- 1. Intimate connection of body and mind.
- 2. Relation of the nervous system to mind.
- Force of will can overcome the obstacles of bodily weakness, etc.
- 4. Effect of giving much attention to pains and discomforts.
- Some conditions of bodily health and vigor, food, sleep, relaxation, rest.
- Mental productiveness helped by systematic division of time.
- 7. Effect of a definite purpose.
- 8. Importance of the power and controlling influence of the will.
- Definition of attention; not a separate power of the mind; the word.

- 10. External and internal attention.
- 11. Attention produced by stimuli; external, internal, natural, unnatural.
- 12. Effects of the unnatural.
- 13. Two kinds of attention: reflex or non-voluntary, voluntary.
- 14. Views of Hamilton, Sully, and Carpenter.
- 15. Importance of the distinction in dealing with children.
- 16. Influence of physical conditions, of mental conditions.
- 17. Influence of environment, of association.
- 18. Illustration of the microscope.
- 19. Effects of concentration illustrated.
- 20. Influence of attention on memory.
- 21. Can attention be given to more than one thing at the same time, possible explanation.
- 22. General importance of attention. Newton's testimony.
- Attention. State of mind in which its energy and activity are concentrated upon a particular object of observation or of thought.
- Reflex or Non-voluntary Attention. Attention produced without the intervention of the will.
- Voluntary Attention. Attention produced directly by an act of the will.





#### CHAPTER XVI.

# AUTOMATIC, IMPULSIVE, REFLEX, AND INSTINCTIVE ACTIVITIES.

Forces Known by Movements.—The mind is known only by its manifestations of activity. These manifestations, when within, appear to consciousness. Outward manifestations are discovered through movements of the body. All movements of the body, however, are not indicative of mental action. Some are produced by forces which, so far as can be ascertained, have no psychical character. At any rate, they do not result from any conscious mental activity.

Forces which are Slightly Mental.—Some other movements appear to be connected with very slight manifestations of psychical action. They are apparently started by a mental impulse and direction, and then go on for a considerable or an indefinite period without further attention or propulsion.

Force of Will.—Others still are altogether voluntary, depending for their inception upon a conscious and positive act of the will, and ceasing whenever the impelling force of will is withheld.

Force Learned from the Movement.—The nature of the originating force may often be determined, or at least conjectured with a good degree of

certainty, from the character of the movement. On the other hand, the character of the movement can be pretty accurately anticipated and described from a knowledge of the peculiar nature of the producing force. The cause manifests itself in the effect; and the effect reveals the cause.

Study of Forces Necessary.—The processes of development in the child, the successive steps by which the human being becomes master of himself, and his various forms of physical and mental activity become so adjusted and correlated in their movements that the whole complex mechanism of body and mind acts in perfect harmony and in ready obedience to the authority of the will, can not be comprehended without some study of these forces. Although they have been incidentally alluded to, and some of them partially described already, they require a more specific enumeration and a more complete explanation.

Automatic or Impulsive Action. — The action of some of the bodily organs is purely automatic. Such is the beating of the heart. The movements are produced and controlled entirely by impulsive force or stimulus generated in certain nerve centers, and acting altogether independently of the will. Strong emotion tends to increase the rapidity and the energy of the beating of the heart, and the feeling of fear and terror sometimes renders it slower and weaker; but the will has no control over it.

**Respiration**. — The action of the respiratory organs is of the same nature. Respiration may be regulated,

to a certain extent, by the will, for the convenience of speaking and singing. We can "hold the breath" for a short time while listening very intently or for any purpose, but the effort soon becomes too painful to be endured. Practically, respiration is automatic like the action of the heart.

Action of Vital Organs.—The movements of all the organs whose regular and uninterrupted action is necessary to the support of life, are essentially of the same impulsive and automatic character, being so far and so completely removed from the control of volition as to be subject to no danger from caprice or forgetfulness.

Impulsive Movements. — The earliest observable movements of a child appear to be altogether spontaneous and random. They are almost, if not quite, as automatic as the action of the vital organs just described. They are called by Preyer purely impulsive movements, distinguished from instinctive movements by having no aim, being altogether purposeless; and from reflex movements by the fact that they are not made in response to any excitation or irritating stimulus. They are entirely unconscious, having no relation to desire or will. They result from the spontaneous overflow or excitation of the nervous centers. This impulsive force expends itself in producing action through the motor nerves. The jerking movements of the arms and legs by young children are caused by this force. So are also the movements of the muscles of the face, which are frequently supposed to indicate feeling.

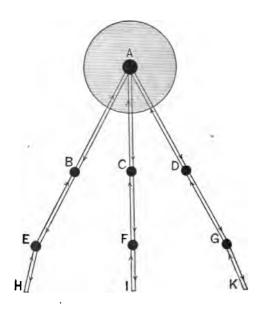
Feeling Mingled. - Many of the movements of children up to three and four years of age are largely of this impulsive and automatic character. Probably, however, the agreeable feeling arising from the exercise of the various parts of the body, under the law of "pleasurable activity," tends to excite the feeling of desire, and to mingle an element of volition with the impulsive force. The origin of such activities is to be taken into account in judging of the character of the conduct of children, and in the demands made upon them in respect to behavior. Their movements are of essentially the same nature as the gambols of young lambs and the sportive frolics of kittens. While such activity is aimless and purposeless, it subserves the important end of securing for the child, as for the animal, necessary physical exercise. Beyond the period of childhood these impulsive movements seldom appear. The movements of the arms, limbs, and of the whole body in sound sleep, may possibly be of this character; but they are more probably reflex in their origin, being caused by irritations of some of the sensory nerves resulting in consequent irritations of the motor nerves.

Reflex Movements. — The next movements observable in the child are those called reflex. These are movements answering to other movements, or to excitations and stimuli of some kind. In case of the impulsive movement there is but a single current of irritation or excitement. The current is from the overflowing nerve center outward. To produce the reflex action two currents are necessary; first, one

from the excited or impressed extremity of some sensory nerve inward to a nerve center, and then one outward from this center along a motor nerve to cause muscular movement. The current inward does not extend so far as to reach the great center of nervous power and of conscious mental activity, the brain. It is intercepted and stops at some local and subordinate center. Purely reflex movements are not attended by consciousness. The person acting has no immediate knowledge of such acts. They are known, if known at all, by their consequences. In this respect they differ from instinctive movements which are evidently accompanied by full consciousness, and also from imitative and volitional movements.

Illustration of the Impulsive Movement.—The diagram will represent to the eye, in a crude way, the supposed origin of the impulsive and of the reflex movements. Suppose A to be the great center of nervous matter and the center of intellection; B, C, D, E, F, G are subordinate local centers in the spinal cord or at other points in the body; H, I, K are points upon the surface of the body, upon the hands, feet, or elsewhere. An impulsive movement, such as the jerking of the arm in the young child, is caused at the point H by the overflow or excitation of nervous force from the center at B, or E, passing along the moter nerve to the surface at H, where it produces a muscular contraction or expansion. There is only a single current, and that is outward from a local center.

Illustration of the Reflex Movement.—A reflex movement at K, for example, which may be supposed to be a point upon the sole of the foot of a sleeping child, is caused by some irritation upon a sensory nerve at that point, by the finger or by some other means, producing a current of excitement along



that nerve to the point G, or D, where it is intercepted and produces an immediate return current from D, or G, to K, which results in a muscular movement withdrawing or changing the position of the foot. Since the sensory current does not go on to the center, A, there has been no conscious knowledge of the movement. If the movement should be very violent, or the limb should strike some obstacle so as to

cause a severe shock to the body, the child might be awakened and thus learn of what had happened.

Early Reflex Acts. - Among the earliest reflex acts of the child are those of swallowing, closing the fingers when the palm of the hand is touched, blinking when an object is thrust toward the eye, sneezing, and yawning. Sobbing and sighing are probably purely reflexive with a young child. Hiccough is of the same nature. Sneezing, yawning, and hiccough are among the few purely reflex movements which remain to the adult. Coughing is generally reflex when it is not altogether imitative, as yawning sometimes is. The act of sucking in the young animal, as in the child, has something of the reflex character, but is, in its origin, instinctive. Ducking the head at the whistling of a bullet, shutting the eyes when sneezing, raising the arm to ward off a blow, and many other familiar movements are mostly, if not entirely, reflex.

Reflex Mental Acts.—The movements referred to thus far are all bodily. A few mental acts seem to partake, to a considerable extent, of the same character. Resentment, although regarded as instinctive, has something of this nature. It is a mental movement answering instantly to a mental irritation. Indignation is closely related to the reflex character, as is also anger. All these can be repressed by an act of the will, provided the movement of the will is prompt enough. Some reflex acts of the body can be repressed in the same way, but, unless there is a

warning beforehand, the act of willing is usually too late to intercept the reflex movement.

Nature of Reflex Attention.— The nature of reflex or non-voluntary attention is now clearly seen. It is merely an answering back of the child to some stimulus or irritant by which some one of the sensory nerves is affected. Some object strikes the eye, some sound the ear, some odor the smell, or some surface the touch, and a response is made. If the irritant is sufficient to challenge the curiosity, then the mind itself turns toward the object, and the attention changes partially from the reflex to the voluntary form.

Movements in School. — Many of the uneasy movements of children in the school-room are more reflex than purposed, and should be treated as such. The sensory nerves become irritated by enforced restraint, by uncomfortable seats, by unnatural positions, and positive force of will would be necessary to prevent movement of some sort. In the case of young children, movements in the school are often more impulsive than reflex, being literally compelled by the overflow of accumulated and pent-up nervous energy. Under such conditions the child should not be held to a severe accountability for his conduct. The proper remedy is to afford opportunity for the legitimate discharge of superabundant energy by appropriate exercise.

Instinct, Mysterious, etc.—Of the forces impelling to action, that which is called instinct is among the most mysterious, the most difficult to comprehend,

and the hardest to define satisfactorily. It is scarcely possible to draw a line of separation between instinct and thinking and reasoning.

Men Said to Think, etc. — When men perform acts perfectly adapted to accomplish results, when they select and use means exactly fitted to bring about desired ends, they are said to think, to judge, to reason, and to act intelligently. It is found that men require instruction and experience in order to become skillful in the adaptation of means to ends, and in order to do the best work of which they are capable. They improve by practice; long practice results in habit; habit renders difficult actions easy and makes those which at first demanded considerable time and much pains-taking care, almost instantaneous and automatic.

Animals Moved by Instinct. — When "animals perform acts perfectly adapted to accomplish results without previous experience and without instruction," they are said to be moved by instinct, and the acts are called instinctive. Such are the acts of bees in constructing honey-comb, and of birds in building nests; of beavers in erecting dams, and of spiders in weaving their webs. The young bee constructs a perfect comb at the first effort; the young bird, with some possible but trivial exceptions, builds as good a nest on the first trial as the parents build after the practice of several seasons; the first dam of the beaver and the first web of the spider are perfect of their kind.

Experience not Necessary to Pure Instinct, -

Neither experience nor observation seems necessary to pure instinct. It acts with marvelous precision and accuracy under conditions where these are not possible. The chicken, when the proper hour arrives, pecks its way out of the shell. Chickens hatched in an incubator, where no imitation of the acts of the hen can be possible, at once seize and swallow insects and peck at other objects. They also recognize the clucking of a hen when heard for the first time, and run toward the spot from which the sound appears to come.

Offices of Instinct. — "The apparent work of instinct, or the operation of the instinctive principles of action, is to fit the animal to the world; to enable him to battle for existence, to hold his place in spite of opposing forces and enemies,—in fact, to make the forces and products of nature his servants so far as they are needful for his perfection. It secures this by putting him at once, by a spontaneous manifestation of impulse, knowledge, and skill, into the needful relations to those objects in nature that are necessary for his individual welfare or that of the species. It does this in many cases with almost the certainty of the operations of the laws of inorganic nature." The province of instinct is to provide for the life and safety of the individual and for the preservation and perpetuation of the species or the race, under conditions in which the teachings of experience, of observation, and of intelligence, as the term is usually understood, can afford no guidance or can not be had. Intelligence is here employed simply to

denote the power to comprehend clearly an object or an end, and to select and use means adapted to secure the object or to reach the end.

Instinct Subject to Limitations, etc.—In order to accomplish the purposes for which it has been implanted, the instinctive impulse is itself subject to limitations and restrictions. If it is, as some affirm, a "blind impulse" or a "blind feeling," its times and modes of activity are such as to compel the conclusion that there is behind it some regulating power. This power probably inheres in the appetites, the feelings, and other constitutional and functional peculiarities of the beings impelled to act by instinct. The conditions of domestication undoubtedly interfere with the natural workings of this power in the case of fowls and other domesticated animals.

Illustrations of Limitations, etc.—Birds are impelled to mate, to build nests, to lay eggs, to rear the young at the right season of the year. The salmon goes from the ocean to the river to spawn. Migratory birds feel the impulse to migrate at the proper time. The squirrel gathers and stores his nuts; the hibernating animals retire to their holes and dens, impelled when the impulsion is needed. Other animals show evidence of the same subjection of the impulse of instinct to periodic direction. The impulse to care for the young continues only so long as care is needed. The animal mother, who yesterday watched and guarded her young and fought fiercely to defend them from harm, to-day drives them angrily and violently from her. This change

of conduct is seen in the hen, in the cat, and in other domestic animals, and is without doubt produced by a change of some sort in bodily functions. In one condition of body the instinctive force impels the animal to one sort of behavior; in a different bodily condition, to an opposite kind.

Instinct and the Senses. - Many instinctive acts have a very close relation to impressions made upon Such acts follow and are guided by knowledge received through the senses. This fact explains most cases in which instinct is said to be deceived, and animals are said to be cheated. The fallibility of instinct in such cases is really the fallibility of the senses, and the animal is cheated by deceiving his senses. The hen gives the note of alarm and the chickens hide for safety when the boy imitates the cry of the hawk. The sense of hearing gives a false report, but instinct acts truly. The sight of the duck, not her instinct, is cheated by the "decoy" of the sportsman. The dog eats poisoned meat because neither smell nor taste warns him of the danger. Instinct does not correct the errors of the senses and, through their mistakes, leads one animal to fly from imaginary danger, and another to certain death.

Instinct and Exercise. — Modifications of Instinct. — Instinct is subject, like other powers, to the law of exercise. Forms of instinct constantly used are strengthened, and apparently rendered more acute and serviceable; forms disused become weaker, and probably after a long time entirely disappear. The

instincts of animals in the state of domestication are greatly modified. Peculiar manifestations of instinct, at first apparently accidental, may be rendered permanent and cultivated to a high degree of perfection. All dogs probably had a common origin and a common manifestation of instinct. By selection and care in breeding, varieties have been made with permanently differing characteristics of form, color, size, and also of instinctive impulses. If new instincts have not been produced, a common one has been most wonderfully modified, and the modifications have been transmitted by the general law of heredity, as the peculiarities of hand, ear, hair, limb, and color have been. The spaniel instinctively takes to the water; the shepherd-dog to the care of sheep; and young "pointers" and "retrievers" do their peculiar work, when first taken out by the sportsman, as perfectly as after long practice. No one of these varieties shows any disposition or aptitude for the work of another variety.

Instinct Differs from Impulse to Random Acts.— Instinct differs from the impulsive force previously described in being chiefly psychical while that is altogether physical; and still more in that the activities which it puts in motion are directed toward definite ends, which, in some cases, must be represented in the consciousness of the actors. It is impossible to suppose the bird proceeding to build a nest without some notion beforehand of the object she is building, or of the bee constructing honeycomb with no idea of the form or character of the comb.

To say that such notions may be derived from observation does not fully relieve the difficulty, since, in many cases of instinctive acts, there can be no opportunities for observation.

Instinct Differs from the Reflex Activity. - Instinctive differ from reflex acts in not being directly correlated to exciting stimuli which can be observed and described. The reflex act is an answer to some challenge, provocation, or irritation. The instinctive activity, though it may be awakened by the stimulation of organic feelings or by other causes, is not in the nature of a reply to these. Appetite is an organic and not an instinctive feeling. The cravings of appetite, however, arouse the instinctive activity necessary for obtaining food both in the animal and in the young child. Probably some organic feeling awakens the nest-building instinct in the bird, and the dam-building instinct in the beaver, and the hibernating instinct in the bear, but the acts following have no reciprocal relation to the feelings.

Definitions Various. — The purposes for which instinct has been given to animals and many of the acts resulting from its impulses are obvious. Concerning these there is general agreement, but definitions of instinct are various, and contradictory in some cases. Paley's is familiar, "Instinct is a propensity prior to experience and independent of instruction." This does not distinguish instinct from random and undirected impulse.

Whately says: "Instinct is a blind tendency to some mode of action, independent of any considera-

tion on the part of the agent, of the end to which the action leads." This can not be accepted by one who believes the animal to have some notion of the object to be accomplished by his instinctive activity.

Another writer says: "The instinct of the present generations is the product of accumulated experiences of past generations. Instinct is inherited memory." This can be accepted as true of many special forms of instinctive activity, but it fails to account for the original instinctive impulse.

On the whole, the following by Dr. Chadbourne is most nearly satisfactory: "An instinct is simply an impulse to a particular kind of voluntary action which the being needs to perform as an individual or representative of a species, but which he could not possibly learn to perform before he needs to act." Under the general term instinct he includes "all the original impulses,—excepting the appetites,—and that knowledge and skill, with which animals are endowed, which experience may call into exercise, but which it does not give."

**Definition**. — For brevity we adopt the following: Instinct is an impulse to activity, directed to definite ends, and to the performance of acts necessary before experience or instruction is possible.

Instinct in Man.—The instinctive activities are much less important and less numerous in man than in many of the lower animals. In human actions, in many cases, the instinctive and the rational impulses become mingled so that it is scarcely possible to determine which predominate. The affection of the

human mother for her child, is both instinctive and rational; that of the father for his family is of the same character, so is also that of the patriot for his country and his countrymen.

Instinct in the Child.—In the young child the acts necessary to the preservation of life, such as sucking, swallowing, which is partially reflex, biting, and some others, are evidently instinctive. The act of creeping is of the same nature. The movements necessary to standing, jumping, running, and walking are also instinctive, although the forces of imitation and instruction are here mingled with the impulses of instinct.

Instinctive Expressive Acts. — Many acts expressive of emotion and of other feelings are clearly instinctive, as they are performed before the possibility of imitation or instruction. Such are crying and screaming from pain or vexation; and sounds indicative of comfort and satisfaction, and the earliest movements of the muscles of the face in smiling. Movements of the head to denote assent and refusal, turning away the head and hiding the face through fear, holding out the hands to receive, and pushing with the hands to indicate aversion, have the appearance of instinctive actions. It does not change their character to call them inherited habits.

Instinctive Fear. — The child exhibits fear of danger before he can have learned from experience or instruction what danger is. He clings to the mother at sight of strangers, trembles at the approach of some animals, is terrified at strange and unexpected sounds.

Knowledge of Instincts Necessary in Dealing with Children.—No one can deal wisely, or even justly, with young children without a knowledge of instinct as manifested in childhood, and without making account of its power over the conduct during that period. Punishments are sometimes inflicted for acts purely or mainly instinctive. The fear exhibited by some children in the "dark" is without doubt instinctive through heredity, although in a majority of cases it is produced by unwise treatment.

Instinct and Intuition.—Instinct in man should not be confounded with intuition. While in some points closely related they are quite distinct in their leading characteristics. Intuition has to do with primary ideas, truths, and beliefs. Instinct has to do with acts and feelings. The truths which we accept without evidence and call self-evident are intuitive. The acts which we perform by an inward impulse without instruction or practice are instinctive.

Feelings Instinctive.—Many feelings are instinctive. These were treated at sufficient length in their proper place and need only be referred to here. Among these are the simple emotions, many of the affections, and most of the desires. Among the instinctive desires are the love of life, the generic desire for happiness, the desire of approbation, esteem, knowledge, property, power, and many others. The love of society, the affections which lead to the conjugal relation, all the domestic affections, the feelings of pity, compassion, and sympathy are instinctive in origin, but are modified and controlled

in their manifestations by judgment and reason. The desire to be remembered and the desire for continued existence are also instinctive. The feelings of awe and reverence in the presence of exhibitions of great wisdom, power, and might appear to be instinctive. Near akin to these and of similar origin are the feelings which impel to acts of adoration and worship.

Instincts Should be Studied.—No man can "know himself" or understand other men who neglects to study the instinctive elements in his nature. The instinctive impulses, in the realm of feeling, afford a basis for much valuable instruction and practical training in respect to character and conduct. Proper appeals to children and to men find an answering response in these feelings, which may be made of great service in the department of "morals and manners."

Stupidity of Instinct.—Examples of cases in which instinct seems to approach very nearly to that reasoning intelligence which consciously and purposely adapts means to ends, are frequently related. The stupidity of instinct is not so often referred to. Sir John Lubbock gives some remarkable illustrations of such stupidity in the conduct of bees. A small part of the covering of a cell, which a bee was closing up after filling it with honey and depositing within it an egg, was broken away. This damage the bee immediately repaired, as she also did some breaks in the walls of half-finished cells. When, however, a hole was made in a cell below the part where the

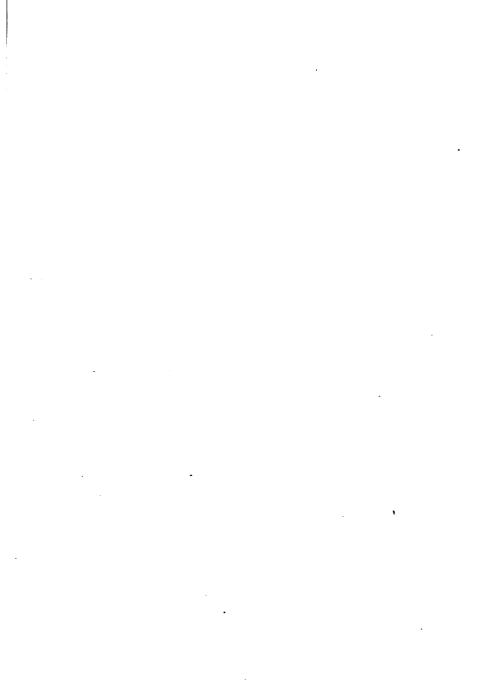
bee was working, and through which the honey at once began to exude, the bee worked on as if nothing had happened, though the honey ran out as fast as it was poured in. This experiment was repeated over and over again, and always with the same result.

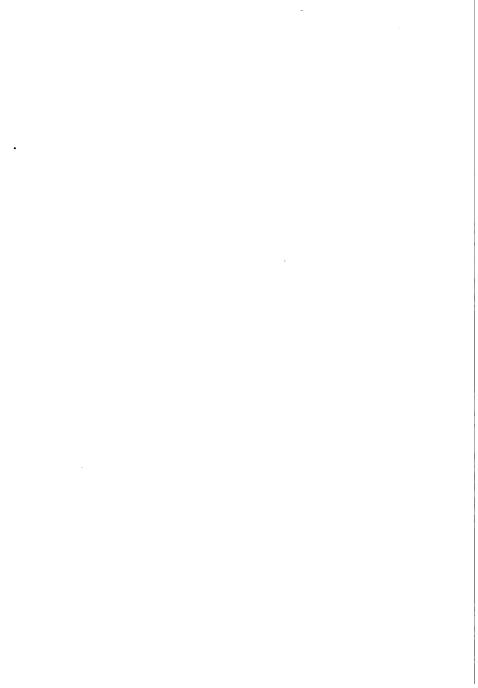
As it was thought possible the bee might not have noticed these small holes, a larger hole was made in the bottom of a cell which contained only a little honey. The bee soon returned with more honey, seemed surprised to find the hole in the cell, examined it carefully, and even pushed her antennæ through it. She did not, however, as might have been expected, stop up the hole, but went on calmly to pour into the cell load after load of honey, which ran out at the bottom as fast as she poured it in at the top. When she had brought the usual quantity of honey, she laid her egg and sealed up the empty cell.

## SUMMARY OF CHAPTER XVI. AND DEFINITIONS.

- 1. Forces known by the movements produced.
- 2. Study of forces producing human actions necessary.
- 3. Automatic or impulsive actions, beating of the heart, resperation, action of vital organs.
- 4. Impulsive movements and force.
- 5. Feeling mingled in these movements.
- 6. Actions of young children.
- 7. Reflex movements, general character.
- 8. Diagram and explanations.
- 9. Early reflex acts of the child.
- 10. Reflex mental acts. Reflex attention.
- 11. Movements of children in school.
- 12. Instinct mysterious. Acts of men adapted to produce results, etc.

- 13. Acts of animals called instinctive.
- 14. Experience and instruction not necessary to pure instinct.
- 15. Offices of instinct in animals.
- 16. Instinct subject to limitations of time, etc.
- 17. Illustrations of such limitations.
- 18. Relation of instinct and the senses.
- 19. Instinct requires exercise. Modifications of instinct.
- How instinct differs from random impulse. How from reflex activity.
- 21. Definitions. Paley, Whately, and others.
- 22. Definition here adopted.
- 23. Instinct in man: in the child.
- 24. Instinctive expressive acts; fear.
- 25. Knowledge of instinct necessary, etc.
- 26. Instinct and intuition.
- 27. Instinctive feelings, emotions, affections, desires.
- 28. Reasons for studying instinct, etc.
- 29. Stupidity of instinct.
- **Automatic Activities** In man many of the activities independent of the will.
- Simple Impulsive Force.—The force which causes the random and spontaneous bodily movements of children.
- Reflex Action. Action answering to other action, or action in direct response to stimuli.
- Instinct. An impulse to activity directed to definite ends, and to the performance of acts necessary before experience or instruction is possible.





## CHAPTER XVII.

#### IMITATION AND HABIT.

Connection Between Imitation, Habit, and Instinct.—An intimate and exceedingly interesting relationship exists between imitation, habit, and instinct. Imitation of acts and processes, continued for some time by an individual, results in personal habit; habit, persisted in for an indefinite period by a family or a species, results in an instinct. In such a case instinct is in truth a transmitted and inherited habit, and the child merely continues unconsciously to imitate the parent.

Order of Progress.—Imitation. When a child, having observed the act of another, attempts to perform it, the effort is named imitation. When through practice he is able to execute the act with a good degree of readiness, ease, and skill, the act is said to have become habitual, and the acquired disposition or tendency is called a habit. When the act is performed with no appreciable exercise of attention and with no conscious determination of will, it is said to be automatic. The road from laborious and painful imitation through the dominion of habit to apparent automatism is direct and natural. The possibility of thus transferring a large number of physical acts, necessary for the support of life, for the transaction

of business, and for the enjoyment of pleasure, from a position in which their proper performance demands serious and constant attention and much and vigorous effort, to a position where they are executed with precision and dispatch and without conscious attention or effort, is a matter of almost supreme importance in the work of education, and to both the material and intellectual progress of the race. A brief study of the development in the child of the disposition and tendency to imitation, and of the nature and power of habit, will help to reveal its importance and value.

When Imitation Begins.—It is difficult, probably impossible, to determine with exactness the time when the impulse to imitation first moves the child. Certain prerequisites are essential. The power of perceiving must have been considerably developed. The child must be able to see an act with some degree of distinctness before he can imitate it. He must be able to represent the act to himself or to form a notion of it. There must be some exercise of will and sufficient control over the muscles to execute the act.

Preyer.—Preyer thinks he detected in his child an effort at imitation at the end of the fifteenth week, but not until the seventh month were the imitative acts so well executed as to be beyond question as to their nature.

Darwin.—Darwin thinks his son attempted to imitate sounds at the age of four months, but is not absolutely certain of the imitation till the sixth month.

Tiedemann. — Tiedemann says of his son at four months: "If he sees any one drinking, he makes a movement with his mouth as if he were tasting something." Other observers put the beginning of the imitative stage of development somewhat later, as late as the ninth month. It should be remembered that in the cases named special efforts were made to attract the attention of the children to certain acts, and to excite the disposition to imitate. No safe conclusion in respect to children generally can be drawn from these few observations. Undoubtedly children differ widely in this as in all other respects. During the first year of a child's life it is a matter of no little difficulty to distinguish with certainty between impulsive and reflex movements and those produced by efforts at imitation.

Earliest Imitative Acts.—Among the earliest imitative acts are movements of the lips, of the head, hands, and fingers. The child soon learns to nod and shake the head, to beckon with the hand or finger, to imitate the action of sneezing, blowing out a light, coughing, and many other familiar acts. A little later he begins to imitate successfully more difficult and complex acts, and attempts the imitation of articulate sounds. He soon masters, by this process, some short and simple words.

Stimulus to Effort.—The pleasure resulting from successful effort is manifested by the young child in his numerous repetitions of acts and sounds which he has mastered in his struggles at imitation. We have here an illustration of nature's method of re-

warding her children. Effort and enjoyment are inseparably bound together, and the pleasure serves to incite to further exertion and greater victories.

Imitation in the Home.—Upon examination it will be discovered that the processes of home development and education during the first years of the child's life consist in little else than the excitation and direction of the imitative propensity by the parents and by older children, and the acquisition of skill on the part of the child in the performance of imitated acts, and in the utterance of imitated sounds. The instinctive act of creeping is attempted earlier and performed more readily and successfully if the young child sees older ones doing the same thing. This is true also of sitting, standing, walking, running, and other common movements of childhood.

Explanation of a Fact.—We have here a partial explanation of the fact that some children acquire easy and graceful forms of movement in early life, while the movements of others are exceedingly awkward and clumsy. Something of this is due to native or inherited characteristics, but much of it may justly be attributed to the examples presented for imitation, and to the direction given to the imitative exertions of the children. The younger imitate the older in movement, manner, and speech; and if the latter are uncouth and semi-barbarous, it will be unreasonable to expect the former to be refined and highly civilized. Hence the importance of bringing children, even in the earliest period, into contact

with persons whose language and behavior afford the best models for imitation.

Imitation in Later Periods.—Later, after the child has gone from the home into the streets and has entered the school, the impulse to imitation still continues to exert its power. The small boy tries to walk and to talk and to behave generally as the bigger boy does. The big boy follows as industriously and carefully as possible in the footsteps of the young man. The little girl imitates the larger girl, and both imitate the school teacher and other more mature people. "Following the fashion" in society is only imitation on a larger scale with a common pattern.

Mental and Moral Imitation. — The processes of imitation go beyond physical movements, beyond manners and dress and other matters which affect personal appearance and conduct merely. By a less obvious but an equally real act of imitation, the young adopt the intellectual and moral peculiarities of the older with whom they associate. The son embraces the moral, religious, and political faith of his father; the daughter imbibes the teachings of her mother. The pupil becomes imbued with the spirit, tone, and temper of the teacher. Public education, as well as domestic, consists largely in stimulating and directing the imitative tendencies and processes. The teacher is not merely an instructor, consciously and purposely training, guiding, and feeding the knowing activities of his pupils; he is also an object of conscious and unconscious imitation, fashioning mind and heart, manners and character by what he himself is more than by what he does. More attention should be given, in all departments of education, to this native disposition to imitate, and to results which may be accomplished through it. The teacher should be chosen as much for what he is, in manners, spirit, and temper, as for what he knows of science, art, or literature.

Habit Requires Consideration.—The relation of habit to imitation and repetition and its general importance have already been alluded to. It requires a little further consideration on account of its peculiar nature, and of the great help or the serious hinderance which comes from it in every sphere of human activity.

Fact of Experience. — This is a fact of common experience: Having performed any act, either physical or mental, once, we discover that each successive repetition demands less effort. The second performance was easier than the first; the third was easier than the second, and so on, until finally scarcely any effort was required. The very familiarity of the fact makes us blind to its wonderful character. We say we do a thing easily and readily because "we have got used to it," without stopping to ask ourselves what it is "to get used" to a thing. Evidently some change must have taken place somewhere in our muscles, nerves, or brain; else why should they move with so much more rapidity and with so much less expenditure of force, and at the same time with so much more precision. It may not be

possible to discover the exact nature of the change, but of its reality there is little room for doubt.

A "Disposition" Remains. — After the performance of an act several times there remains, it is said, "a disposition to perform it whenever it is suggested." This disposition is also called a "tendency." and an "inclination." Without doubt some change has taken place in the nerves and muscles concerned in producing the movements of the parts of the body involved in the action. This change is purely physiological, and the resulting condition of body has a tendency to become permanent. When this occurs the habit is said to be fixed. "Getting used to a thing" consists in the production of this change of physical condition. It is possible that some psychical modification also is involved in the creation of this "disposition," but of its character, apart from physical modifications, we have no knowledge.

"Disposition" not Desire. — This "disposition" must not be confounded with desire. Desire may act in harmony with it and in the same direction, or it may act in opposition to it and in a contrary direction. A person has contracted the habit of using opium or morphine; that is, a "disposition" has been formed which impels him to use it. He earnestly desires to be freed from the power of this habit. A severe struggle takes place between this artificially created disposition and genuine desire. A child has formed the habit of disobedience. He finally becomes convinced of the evil of the habit, and really desires to obey. In spite of the desire, the disposi-

tion will continue to impel him to the old course of action. The personal experience of every individual will suggest an over-abundance of similar illustrations.

Influence of Association. — The power and effectiveness of this disposition are greatly increased by
the influence of association. This is, however, only a
special example of the operation of a general law
considered in the study of memory. Places, persons,
articles of furniture, etc., are associated with habitual
acts. The sight of these excites the activity of the
disposition, and often causes the performance of an
act without the intervention of the will and without
any distinct consciousness of the necessary effort.
The person who wishes to break off certain habits
will find it necessary to avoid certain places and
certain persons, however much confidence he may
have in his power of resistance.

Habit Defined. — With these explanations and illustrations habit may be defined as a disposition or tendency of either body or mind created by the repetition of acts and states. The aggregate of such dispositions in an individual constitutes his habits. Habit and custom are nearly related, but are not the same. Habit is the internal disposition; custom the external act frequently repeated. Customs lead to habits, and habits perpetuate customs. Old and useless customs are kept up by the force of habit.

Habits a Necessity of Nature. — The formation of habits is a necessity of nature. The tendency to such formation is exhibited very strongly, even in early infancy. At this period habits are fixed easily

and rapidly from the fact that the physical organism is exceedingly plastic and impressible, and yields at once and without resistance to the changes demanded by any mode of activity. Mental habits are also induced with equal facility. The training processes in education have for their end the creation of right habits, and through these the production of practical skill. Man has been well called "a bundle of habits," and personal experience testifies to the truth of the adage. Many a man would give much to be rid of habits fastened upon him in youth, and which have been clogs and fetters, making every step of progress in certain directions toilsome and painful. He has accomplished only half of what he might have accomplished but for these annoying and irritating shackles. On the other hand, many men owe a large measure of their success in literary and scientific labors and in practical affairs to the early formation of desirable habits.

Value of Habits.—The reason is obvious. The habitual act demands for its proper execution less attention and less effort. Such acts can be performed with less outlay of time and strength; and besides this saying of time and energy, the work is better done. It is of advantage to have a regular and orderly routine in the business of daily life, whatever that business may be. By such an arrangement the passage from one duty and one form of labor to another is made without delay and with hardly conscious effort, many of the movements and processes becoming almost if not quite automatic.

Acts Become Automatic. — It is only by handing over as many as possible of our every-day acts and duties to be cared for by the automatic forces, the lower nerve centers, that energy and opportunity can be found for higher forms of labor and for higher acquisitions in any department of activity. These can be thus remitted whenever they have been rendered thoroughly habitual, and not till then. The aim of the parent, the teacher, the student, the man of affairs, should be to free himself, as far and as completely as practicable, from the necessity of expending upon routine drudgery the power, either of body or mind, needed for other and nobler purposes. To a considerable extent this is done without conscious purpose or intention. Illustrations are abundant.

Illustrations, etc.—The young child devotes his whole energy of mind and body to the process of walking. Walking to the man is nearly automatic. The boy learns to write with much and painful effort; the man thinks and his fingers move of themselves. The girl, in her first practice on the piano, finds physical and psychical energy both exhausted in directing her fingers to the right keys; the hands of the master need no direction, and seem to find the keys by instinct. Higher illustrations will suggest themselves.

Habits of Feeling and Conduct.—The domain of habit extends beyond the physical and intellectual activities of man; it embraces the feelings and the conduct. Habits of right feeling and right living are

of higher importance to the individual and to the community than even good habits of body or of intellectual labor. Any mode of feeling, indulged and cherished, grows deeper and stronger, and soon exhibits a "disposition" to recur without apparent cause. At first the feeling may have been excited by particular persons, places, or circumstances, and may be associated with these so that it is aroused only at sight or at remembrance of them. Soon, however, it recurs without reference to persons or circumstances, and tends to assume the character of an habitual tone and temper of mind. Children in this way, through unwise indulgence on the part of parents and others, become permanently peevish, fretful, irritable, and ill-tempered at a very early period. Others, by wiser though apparently more severe and less affectionate regimen, are trained to habitual cheerfulness, amiability, and good temper. Currents of feeling, like currents of thought and currents of nerve excitation, wear for themselves channels in which they continue ever after to flow with constantly increasing rapidity and force. As a natural result of this acquired tendency of mind, men, whatever their original disposition might have been, become, by degrees and often altogether unconsciously, gloomy, morose, and even "bearish," thus depriving themselves and their immediate associates of all possibility of making life comfortable and desirable. By taking advantage of this same psychical law persons, whose native temperaments and dispositions may have been unfortunate, can train themselves to habitual cheerfulness, hopefulness, and kindness of feeling by regular and persistent effort.

Relation of Habit to Feeling and Character. — We touch here the province of morals and questions of conduct and character. The emotions, affections, and all other modes of feeling tend to the creation of desire or aversion. Desire excites and moves the will and action follows. Desires become permanent and resulting conduct becomes habitual. Habitual conduct is an index and outflow of permanent native and acquired dispositions and tendencies of mind, that is, of character.

Character Defined. — Character is sometimes defined as "what a man is." What "a man is" is the sum of the dispositions, inclinations, and states of his mind. If these are good, his character is good; if these are bad, his character is bad. So far as habit results in mental and moral "habitudes" or permanent dispositions of soul, it produces character. Consequently the formation of habits becomes a question of morals. A man is morally bound "to make the most and best of himself," and to contribute whatever he is able to the happiness of his fellows and the general good. His ability to accomplish either of these objects will depend, to a very great extent, upon the habits to which he is trained in childhood, or which he voluntarily acquires in later periods.

Habit in Moral Education. — The moral education of the child includes the inculcation of sound principles, the development of tender, wholesome, and

healthful sensibilities, and the formation of good habits. The training to right conduct of necessity commences before instruction, since the child commences to act while he is yet ignorant of the moral character of conduct, and incapable of understanding and appreciating appeals to judgment or reason. His earliest habits. consequently, are involuntary and involve no responsibility on his own part; nevertheless the beginnings of moral conduct and character are found in these. Required and compelled by conditions and the will of others to behave in a prescribed way, this kind of behavior gradually but yet rapidly becomes habitual. to the child. The growing habit soon renders it easy; the feeling of compulsion and restraint disappears, and a feeling of satisfaction akin to pleasure takes its place. In this way the child learns to obey the wishes of his parents, to abstain from violent expressions of irritation and ill-temper, to have regard for the rights of others, long before he comprehends the moral distinction between right and wrong, or discovers any reason why such conduct should be preferred to its opposite. Having begun right-doing through physical compulsion, he presently continues this course of conduct through the gentler compulsion of habit. By this process obedience, self-control, truthfulness, and the other virtues of childhood become habitual. The power of habit continues to be felt even in mature life, and not seldom serves as a strong bulwark against the onsets of temptation when other defenses have given way.

Influence of Conduct upon Feeling. —It is some-

times affirmed that correct external conduct, good behavior on the part of the young, secured by restraints and constraints, has no moral value, and neither indicates nor affects the real character. While there is a measure of truth in this affirmation, those who make it overlook a most important psychological law; namely, that conduct reacts upon the mind, and tends to produce the mental states and feelings of which the behavior is the natural index and outgrowth. The law is true in respect to language as well as actions. Every feeling has its . own legitimate mode of expression in words, tones, gestures, and positions, and if freedom of expression is refused the feeling soon begins to subside. On the other hand, if full liberty of expression is permitted and encouraged, the strength and urgency of the emotion or affection are correspondingly increased. Consequently, if the child is restrained from external expressions of anger and ill-will, these passions have less opportunity for development and growth. If he is required and encouraged to exhibit the external indications of kindness, good-will, and benevolence, both in language and conduct, the development and growth of these feelings are promoted. The internal character, the dispositions and tendencies of mind, are thus fashioned by modes of action which had their origin in the compulsion of circumstances, and are continued, to some extent, by the force of habit. In every view habit is a most potent and effective agent in moral devolopment and training.

Law in the Formation of Habits. — The processes by which habits are formed are subject to readily recognized laws. Water wears no deep and permanent channel so long as it is allowed to spread itself over a wide surface. The stream must be narrowed and deepened; its force must be concentrated, and kept in action upon the same line of direction for months and years. In like manner the mental and physical energy of the child or the man must be concentrated upon the form or mode of action which is to be transformed into a habit. The act must be repeated indefinitely and without material variation. It is essential that the process be uniform in all details; otherwise the channel along which the nervous and psychical energy is expected to run will be neither deep nor sharply defined.

Illustrations.—The young child will contract the habit of putting his "playthings" in their proper place, the older child, his books and articles of clothing, if obliged to do this every day and every time without deviation. The pupil will soon form the habit of doing all his school work in a neat, uniform, and accurate manner, if this is insisted on, at the outset, in all lessons and at all times and places. The student will create in his own mind a "disposition" to uniformity, precision, and thoroughness in literary and scientific work, if he allows himself no deviations under any conditions or excuses. A habit of rectitude in business, in all social and other relations will be established if the decisions of judgment and the demands of conscience are invariably regarded.

Habit Sometimes an Evil. — The force of habit, if wrongly employed and badly directed, like any other beneficent and useful force, may become a most serious obstacle to development and progress. This has already been incidentally implied. It is a work of more difficulty to unlearn an old habit than to learn a new one. A double labor is imposed, therefore, by the formation of bad habits in childhood or in youth. Habits of idleness, carelessness, dissipation, and of irregularity of any kind, having once been transformed into fixed dispositions of mind and thus converted into "second nature," are not uprooted and destroyed except by vigorous, long-continued, and often most painful effort. The sowing of "wild oats" is not a natural preparation for reaping an abundant harvest of cultivated grain.

Habits an Obstruction to Progress.—It is true, also, that habits, not morally objectionable, are sometimes hindrances to intellectual progress and to efficiency in the work of learning or teaching. Mr. Sully says: "Taken in a narrow sense, habit is in a manner opposed to growth. By following out a train of ideas again and again in a certain way, we lose the capability of varying this order, of re-adapting the combination to new circumstances. Habit is thus the element of persistence, of custom, the conservative tendency; whereas growth implies flexibility, modifiability, susceptibility to new impressions, the progressive tendency." The danger from this element in habit needs to be guarded against by students and by teachers who expect to keep fully up

with the progress of events, with the improvements in the sciences and arts, and with the changing methods of study and instruction.

Influence of Habit on the Sensibilities. — Another seemingly unfortunate but unavoidable result of habit is a matter of common observation and experience: Persons living from childhood in the midst of the most beautiful scenery become apparently blind and insensible to its beauty; or dwelling amid the most sublime of Nature's works, they see in them nothing of sublimity. It is questionable whether these individuals, if transported to other places and surrounded by other scenes and objects of beauty and sublimity, would be susceptible to any depth of emotion.

Habit and Domestic Feelings. — The feelings which have their origin in the domestic and social relations afford another illustration of the influence of familiarity. Members of a family living constantly together seldom exhibit great depth or intensity of emotion at sight of each other. When a meeting occurs, after a separation of considerable length, such intensity manifests itself. In this case the susceptibility to feeling is not destroyed, but the ordinary mode of manifestation is modified. Depth, and strength, and quietness of expression take the place of glowing heat and overflowing ebullition. Habitual and regularly recurrent feelings assume a calm and equable mode of expression, which may detract somewhat from the immediate keenness of the pleasure, but which contribute to its duration.

The flame does not flash and sparkle so much, but it burns longer and more steadily.

Transmitted Habits. - Mention has been made of the transformation of habits in animals into instincts. Something of similar nature occurs in the human race. Special peculiarities both of mind and body are transmitted from parents to children frequently through several generations. These peculiarities have in most cases, without doubt, been acquired by force of habit, either physical or psychical. The disposition or tendency thus created in the physical organism and in the mind of the parent re-appears in the body and mind of the child. When these dispositions are of an elevating character they are of great service to the fortunate inheritor, bringing to his aid in the "struggle of life" the effective force accumulated during many previous years through the good habits of a virtuous ancestry. When these dispositions are degrading they become an "inheritance of woe," congenital fetters and clogs, impeding every step and making effort doubly wearisome and exhausting, and rendering the attainment of high excellence a matter of extreme difficulty.

Inherited Tendencies Produced by Intemperance.

— This most unfortunate condition finds peculiarly strong manifestation in those who have inherited dispositions and tendencies created by indulgence in the use of intoxicating liquors, of opium, and some other narcotic drugs. "The drunkard not only injures and enfeebles his own nervous system, but entails mental disease upon his family. His daugh-

ters are nervous and hysterical; his sons are weak, wayward, eccentric, and sink under the pressure of excitement of some unforeseen exigency, or the ordinary calls of duty.

"If they pursue the course of their fathers, which they have more temptation to follow, and less power to avoid, than the children of the temperate, they add to their hereditary weakness, and increase the tendency to idiocy or insanity in their constitution; and this they leave to their children after them." The guilt incurred by the formation and transmission of such tendencies can hardly be over-estimated.

The Tobacco and Opium Habits. — Recent investigations have proved that large numbers of the boys in the public schools of some of our cities, in a few cases forty per cent., use tobacco either habitually or occasionally. In not a few instances they commence the practice as early as at eight years of age. It is hardly possible to exaggerate the pernicious effects of this habit upon the muscle, nerves, and brain of the immature boy. His vitality is sapped, and he never becomes the man he might otherwise have been. The result is a general flabbiness of the whole nature, mental and moral as well as physical.

By the law of heredity the evil effects go beyond the immediate victim, and entail a burden of ills and woes upon posterity.

The opium habit is even more dangerous and more destructive than the tobacco habit. It is much more seductive and fascinating in its character. It seems to cast a fatal spell over its victim, and drags him steadily down to physical, intellectual, and moral ruin. The power of self-control and self-direction is soon lost, and the ability to resist the raging demands of an unnatural appetite utterly disappears. The sensibilities are blunted and moral discrimination gradually fades away. The habitual user of opium becomes a pitiable wreck, and bequeaths to those who come after him the patrimony of his own wretchedness and misery.

A Word of Encouragement. - A word should be added for the help and encouragement of such as have, through no fault of their own, received this terrible inheritance. They are placed at great disadvantage; they are compelled sometimes to struggle against almost insuperable obstacles; but their condition, though discouraging, is not by any means hopeless. Congenital dispositions can be resisted, overcome, and partially at least eradicated from the constitution. The sons and daughters of unfortunate or vicious parents need not despair. "The law of heredity recognizes periods of limitation, as a necessity for the continuance of the race. If it were not for such a law, and the degenerative process were to be continued, without deviation or exhaustion, the reproductive powers would sooner or later terminate. and the race become extinct. It is evident that the individual who is conscious of an inherited tendency to alcoholic excess, may do much to modify, if not to control, its force, by placing himself under such conditions of living as will tend to increase his constitutional vigor in the direction in which it is most needed."

Testimony of Consciousness.—After all that is affirmed of the power of heredity, and in spite of all theorizing, we have a consciousness that the will, unless utterly destroyed by the most vicious and degrading habits, has self-directing power; we feel that we can modify and, to a considerable degree, control circumstances; that we are not doomed to drunkenness or to any other form of degradation because an ancestor acquired and transmitted to us an unfortunate tendency. Let it be freely conceded that hidden dispositions course in our veins; that a "taint" vitiates our blood; that concealed enemies lurk to pounce upon us at some unguarded moment; that constant watchfulness is the only guaranty of safety; - yet we are not utterly helpless, mere floating wrecks, with no power of self-direction and no possibility of escape from the dangers which threaten us.

# SUMMARY OF CHAPTER XVII. AND DEFINITIONS.

- 1. Connection between imitation, habit, and instinct.
- 2. Imitation and habit explained.
- 3. When an act becomes automatic.
- 4. When imitation can begin in the child.
- 5. Testimony of various writers on this point.
- 6. The earliest imitative acts. Stimulus to such acts.
- 7. Imitation in home education.
- 8. Explanation of a well-known fact.
- 9. Imitation in later periods, in the school, etc.
- 10. Mental and moral imitation.
- 11. Attention should be given to the education of the imitative disposition.

- 12. Why habit should be studied.
- 13. A fact of experience. Getting used to things.
- 14. A "disposition" remains to repeat acts, etc.
- 15. This disposition to be distinguished from desire.
- 16. Influence of association upon this disposition.
- 17. Definition of habit; need of explanation. Custom.
- 18. Habits a necessity of nature, will be formed.
- Value of good habits. Automatic acts, etc.; illustrations of these.
- 20. Habits of feeling and conduct.
- 21. Relation of habits to feeling and character.
- 22. Character defined.
- 23. Habit in moral education.
- 24. Influence of conduct upon feeling, and upon character.
- 25. Law in the formation of habits. Illustrations.
- 26. Habit may be an evil. Unlearning difficult.
- 27. Habit an obstruction to progress.
- 28. Influence of habit on the sensibilities.
- 29. Habit in connection with the domestic feelings, etc.
- 30. Transmitted habits. Their influence.
- 31. Inherited tendencies produced by evil habits.
- 32. A word of encouragement. Testimony of consciousness.

Imitation. — Copying a pattern. Performing an act after observing it.

**Habit.**—A disposition or tendency of either body or mind created by the repetition of acts and states.

Character. — What one is in mind and heart. The sum of the dispositions, inclinations, and states of mind.

Custom. — An external act frequently repeated.

	•		



# CHAPTER XVIII.

#### MOTIVES AND CHARACTER.

Personal Experience. — Before the performance of a voluntary act we are conscious of a mental process like the following: Some object of sense-perception or of thought having been brought to our attention, we examine it with such carefulness as to be able to estimate its nature and value. Its value to us will be determined by the amount of pleasure, satisfaction, or enjoyment of some sort which we believe it is capable of affording us. The pleasure may be that experienced through the senses. The object may be adapted to gratify the taste, or the smell, or the hearing, or the sight; or it may be such as to minister to the higher capacities of our nature. It may be calculated to please the imagination, the esthetic power, or the moral sensibilities.

Judgment Guided by Experience.—In its decision as to the worth of the object the judgment must obviously be guided by the results of previous experiences. If it is an object of sense it must have been seen, handled, smelled, or tasted at some former time; if not this identical object, one of the same or of a similar sort. Memory must bring into consciousness some representation or remembrance of satisfaction or pleasure previously enjoyed; and the

mind must be able to anticipate a repetition of the former enjoyment.

Desire Excited.— This remembrance and anticipation excite a feeling of desire. The judgment pronounces the object desirable. This desire moves to an act of will, and we determine to get possession of the object. The necessary and appropriate physical act follows. This familiar mental process involves an activity of knowing, of feeling, and of willing. The order is invariable. The external voluntary act would not have been performed without the antecedent mental act of willing; there would have been no willing unless the feeling had preceded; the feeling would not have been excited but for the knowledge; the knowledge was conditioned upon the presentation of the object.

Motive Defined. — That which moves or influences the will to an act of volition is called a motive. In the case here supposed what is the motive? Is it the external object which excited or stimulated the feeling of desire? or is it the desire which, in the psychical process, stood immediately behind the will and impelled it to action? The term motive, as commonly used, includes both these, the external incitant and the internal resulting desire.

Two Things Necessary to Volition.—Both are necessary to an act of volition. Here, as everywhere else, we see the correlation between the inner world of mind and the outer material world. Within is the susceptibility or appetence of soul; without is the object, the stimulus, exactly adapted to appeal to

the appetence and arouse it to activity. Either apart from the other would be powerless.

In Strictness of Speech Desire is the Motive.—
Strictly speaking, the desire, the immediate impelling
psychical force which precedes every act of volition,
is the motive. The objects which excite desire,
whether they be material things, or mental representations, or processes of thought, or conclusions of
reason, or impulses of conscience, are properly called
stimuli, incitements, or incentives. In obedience to
custom, and for "convenience sake," the term motive
will also be employed to denote these.

Insensibility to Motives Explained. — The necessity of a correlation between an external incentive and an internal susceptibility explains the reason why some individuals are entirely unaffected by motives which have great power over others. It also suggests that, in the management and training of children, there should be a wise and careful adaptation of incentives to the condition of the child, and to the stage of mental and moral development which he has reached. The same regard to adaptability must be had in efforts to influence and to move to action men of different degrees of civilization, culture, and refinement. It would be literally "casting pearls before swine" to attempt to influence the savages of Central Africa by motives which might be most effective when addressed to an audience of enlightened Americans or Europeans.

Effect of Repetition, etc. — In the employment of incentives to create emotions and other feelings it will

be of importance to keep in mind the effect of repetition and familiarity upon the sensibilities. A touching tale of misfortune and suffering, heard for the first time, excites deep and vivid manifestations of feeling and, if relief and help can be rendered, moves the will to instant and vigorous activity. If repeated, each subsequent recital stirs less and less of emotion until finally, if the iterations are continued, the listener, who was at first affected even to tears, ceases to exhibit any evidences of pity or sympathy. The naturally keen and tender sensibilities of young children are not seldom blunted and rendered callous by unwisely repeated appeals to filial and fraternal affection, or to love of approval and esteem, or to any of the feelings peculiarly active in childhood.

Conflict of Motives. —We are conscious in ourselves of what is called a "conflict of motives," or a struggle, of greater or less intensity, between opposing desires excited by different objects. We observe abundant evidence of this same conflict in others, especially in the minds of children who have not acquired any considerable degree of control over the outward indications of psychical states. One incentive kindles desire which draws the child or the man in one direction, toward one course of conduct, to the performance of acts of a particular kind; another incentive arouses desire which tends to impel him in an opposite direction, toward an entirely different course of life, and to the performance of acts altogether unlike in character. Under these circumstances the child, or the adult of feeble will power, is carried along by the strongest current; the decision of the will is determined by the "preponderance of motives." Very little of that self-directing power, implied in what is called "freedom of the will," manifests itself. The person, whether child or man, of less strength of will, of less force of character, is almost helpless when brought into intimate association with others of greater strength of will and greater force of character. In judging of the merits and demerits of children, this fact should be taken into account.

Self-directing Power.—The case is different with men of mature and well-developed and well-disciplined mental and moral powers. They are able to "select, among the motives which present themselves," those which they consider "the most worthy;" and they "can intensify the force of these by fixing the attention upon them." They can shut the eyes to some allurements, and look steadily upon others. They can close the ears to some voices and open them wide to others. They can, by the self-determining force of will, turn away from one class of enticements and yield themselves to the solicitations of another class. They can restrain the impulses of desires, even when they reach the intensity of passions.

Help from Habit.—In the struggle between contending motives the power of habit, when right habit is once formed, is of great service. Every act of resistance against the impulse of an unworthy motive of any kind renders the next act of resistance easier.

The struggle is less fierce and less protracted. The boy, who mastered and held in check yesterday the impulse of anger, will to-day conquer the impulse more easily, and to-morrow more easily still. The child, who yields once to the solicitations of duty and conscience, will yield more readily and more cheerfully when the same solicitations are again heard or felt.

Predominant Motives.—By virtue of this law of habit certain motives findly become habitual, and the will becomes accustomed to surrender itself to their impulses and demands. These motives thus attain to the rank of permanent and dominant "dispositions" of mind, and are recognized as elements of character. The "education of the will" consists essentially in the processes by which this condition of mind is brought about.

Dr. Morell's Testimony.—Dr. J. D. Morell says with great truthfulness and force: "The education of the will is really of far greater importance, as shaping the destiny of the individual, than that of the intellect; and it should never be lost sight of by the practical educator, that it is only by the amassing and consolidating of our volitional residua in certain given directions, that this end can be secured. Theory and doctrine, and inculcation of laws and propositions, will never of themselves lead to the uniform habit of right action. It is by doing, that we learn to do; by overcoming, that we learn to overcome; by obeying reason and conscience, that we learn to obey; and every right act which we

cause to spring out of pure principles, whether by authority, precept, or example, will have a greater weight in the formation of character than all the theory in the world.

Object of Parent and Teacher.—The object of the parent and of the true educator, in moral training, is to lead the child to act, both voluntarily and habitually, from the highest and noblest motives. It should be the purpose of every man, and above all of every student and scholar, to train himself to obedience to this same law of conduct. Only in this way can consistency and uniformity of right conduct be secured.

Motives Arranged in Ascending Series. — In the training of childhood it will be found necessary to arrange incentives in the order of a regularly ascending series. Each must be employed in turn, as the inner susceptibility or appetence to which it appeals is developed. The development of the higher susceptibilities can be hastened by careful and judicious appeals, which do not overtax and exhaust their growing strength. Their development can be retarded, and their proportions can be dwarfed, by studiously avoiding or neglecting to excite and stimulate their activity by proper means, and by appeals proportioned to their degree of maturity. If, in childhood, incentives are never employed which address the sense of propriety, of honor, and of duty, these motives will seldom be strong and effective in the periods of youth and maturity. They will scarcely ever become the dominant dispositions, the active and governing

forces, in the mind. In all cases the highest possible motive should be employed.

Parallel Series of Motives.—Incentives may be arranged into several parallel series more readily and satisfactorily than into one single series. The following is designed merely as a suggestive arrangement which the student or teacher can vary according to the conditions and demands which may present themselves.

- 1. First series. The satisfaction, enjoyment, pleasure, resulting from approval, commendation, esteem, praise, etc. Under this head will be placed the approval, esteem, etc., of parents and other members of one's family; of associates and friends, companions of one's own age, school-mates and others; of older persons, instructors, and persons of worth and influence in the community; "last, but not least," of one's self, of the good every-where and of God Himself.
- 2. Second series. The satisfaction and pleasure resulting from activity, from the proper and legitimate exercise of one's powers. Under this head will be included the pleasure derived from the normal and rightly limited activity of the bodily powers; and also from the proper exercise of all the intellectual powers, perception, memory, imagination, etc.; likewise from the regulated activity of the sensibilities, the emotions, affections, and desires; and most of all from the right exercise of the moral powers and feelings. The satisfaction resulting from right-doing in all the relations which one may sustain, to

himself, to relatives, to associates and friends, to the community, to the State, to all mankind, and to God.

3. Third series. The satisfaction and enjoyment derived from possession. In this series will be included the pleasure resulting from anticipated possession as well as from actual, present possession, "the pleasures of hope," and the more enduring riches stored up by the accumulating power of faith. Among the many pleasure-giving possessions are the possession of approval, esteem, knowledge, power, wisdom, excellency of personal character, and the Divine approbation. This series embraces a great number of particulars which need not be enumerated, since they will readily occur to the mind of one seeking incentives of this class.

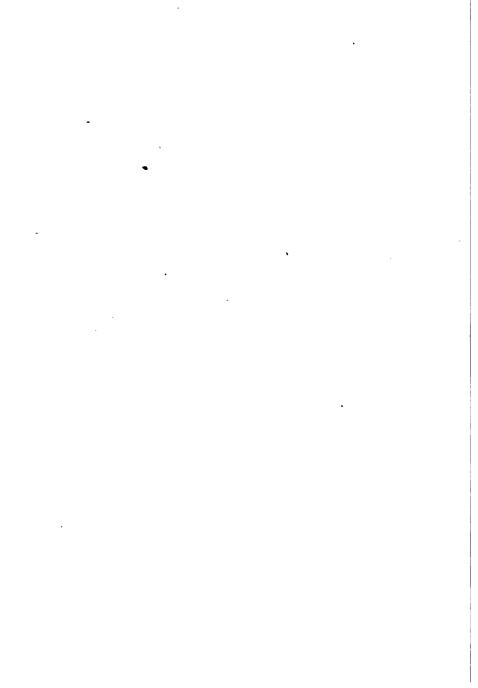
The Highest Motive.— The highest incentive is the desire to be and to do right. This is duty in the broadest use of the term. The terms pleasure, enjoyment, satisfaction, although not strictly synonymous, have been employed here, without discrimination, to denote a state of mind resulting from the gratification of healthful instincts and of wholesome and morally right desires. The term happiness has been avoided.

Happiness. — Happiness, though incapable of satisfactory definition, indicates a state of being resulting from the highest possible development and culture of all the powers and capacities of the soul, and the right employment of all its activities. True happiness is not simply pleasurable emotion.

## SUMMARY OF CHAPTER XVIII.

- 1. Testimony of consciousness in an act of choice.
- 2. Judgment guided by the results of experience.
- 3. Desire excited by remembrance and anticipation.
- 4. Motive defined. Two elements, incitement and appetence.
- 5. Insensibility to motives explained.
- 6. Effect of repetition upon feelings.
- 7. Conflict of motives. Condition of the child.
- 8. Self-directing power in man.
- 9. Value of habit in this conflict.
- .10. Predominant motives and character.
  - 11. Extract from Dr. J. D. Morell.
  - 12. Object of parent and teacher.
- 13. Motives must be arranged in ascending series.
- 14. Three parallel suggestive series.
- 15. The highest incentive, duty.
- 16. What the term happiness indicates.





## INDEX.

ABSTRACTION, 75; defined, 87.

Acquisition, Desire of, 157.

Acts, Early reflex, 233; reflex mental, 233; instinctive, 242; become automatic, 256.

Action, Reflex, of activities, 171; impulsive or automatic, 228; of vital organs, 229; reflex, 246.

Activity, Law of pleasurable, 118; regulated, 188.

Activities, Mental order of, 170; reflex influence, 171; automatic, 246. Æsthetics, 123.

Affections, 113; defined, 126, 148; egoistic, 127, 148; altruistic, 127, 148; classes of, 128; domestic, 128; defensive, 138, 148; malevolent, 140, 148; moral, 188.

Alarm. 160.

Altruistic feelings, 127, 148. Ambition, 158.

Analogy, 102; examples of, 103; basis of, 104.

Analysis, 75; defined, 87.

Anger, 142; tendency and effects, 143.

Appetites, 115; natural, 115; acquired, 116; involve morals, 116; relation to motives, 117; defined, 126.

Apprehension, 160.

Approbation, Desire of, 155; feelings of need control, 181.

Association, Laws of, 46; influence of feeling, 62; laws defined, 71.

Attention, 56; defined, 71, 213, 226; condition of retention, 56; selects and determines association, 57; relation to repetition, 59; the word, 213; external and internal, 214; produced by stimuli, 215; voluntary and non-voluntary, 218; statements of Hamilton, Sully, and Carpenter, 218, 219; influence of conditions, etc., 219-221; prime condition of memory, 223; importance of, 224; nature of reflex, 234.

Authority, Evidence of, asked, 192, 193.

Automatic, movements, 163. Aversion, 149.

Beautiful, The feeling of, 122; how produced, 122; the morally beautiful, 184.

Belief, accompanies judgment, 83.

Body, Knowledge of, important, 7; intimately connected with mind, 15, 209; feelings of, 114.

Books, caution as to use, 4.

Brain, 9.

Bridgman, Laura, 24.

CHARACTER, what, 258; relation to habit, 258; defined, 268.

Child, the, Position of, 17; recognition of objects, 35, 36; use of terms by, 81.

Children, Dealing with, as to conduct, 191.

Choice, 166.

Classification, Processes involved in and basis of, 77.

Comparison, Early activity of the power, 18.

Compassion, 137.

Concentration, Effect of mental, 222. Conception, Simple, 38; general, 76; defined, 76, 87.

Concepts, Simple, 38; general, 74; formation of, 75; difference between the simple or individual and the general, 76; differ from abstract ideas, 80; differ from judgments, 84; general defined, 87.

Conduct, Influence of, upon feeling, 259.

Conscience, Nature of, 178; use of the term, 179; defined, 186.

Consciousness, defined, 1, 6; knowledge which it gives, 27; testifies to freedom of the will, 168.

Contiguity, Law of, 50; applications of, 50-53.

Contrast, Law of, 49.

Curiosity, Early, 154; change with age, 155.

Custom, relation to habit, 254; defined, 268.

DEDUCTION, Illustrations of, 93; basis, 94; defined, 105.

Definition, Nature of, 78.

Descriptions, essentially classification, 78.

Desire, 114; defined, 126, 161; a single feeling, 149; usual varieties, 149; how excited, 150; the universal motive, 151; some forms of, 154-157; precedes volition, 167; moral, 183.

Despair, 159.

Diagrams, showing relations, 195, 207.

Discouragement, 159.
acrimination, Early activity of, 18.

Disposition, produced by habit, 253; not desire, 253; influence of association upon, 254.

Doubting, State of mind in, 83. Dread, 160.

Duration, Idea of, 29; units for measuring, 30.

Duty, what it is, 206, 208.

EDUCATION, First step in, 19; second step in, 23; influence of, 204.

Egoistic, feelings, 127, 148.

Elaborative, or thinking activities, 106.

Emotions, 113; instinctive, 118; rational, 119; occasioned by wit, etc., 120; defined, 126; egoistic, 127.Emulation, 156.

Envy, 144.

Esteem, Desire of, 155.

Evidence, 101; rules as to circumstantial, 102.

Fallacies, 96; illustrative diagram, 97; examples, 98.

Fancy, 41; defined, 44.

Fear, 160; instinctive, 242.

Feelings, Bodily, 14; not represented, 38; effect of upon retention, 60; relation to thought, 61, 107, 110; not definable, 108; varieties, 109; motives, 112; as to classification, 112; organic, 114; exhibited by animals, 117; occasioned by the beautiful, 121; by the sublime, 124; egoistic and altruistic, 127, 148; summary of, 162; various kinds, 179-183.

Forces, 227; study of necessary, 228; impulsive, 246.

Freedom, necessary to responsibility, 173.

Friendship, 130; value of, best taught, 131.

Generalization, 76; defined, 87; hasty, 92.

Good, Use of term, 149; defined, 161; highest, 161.

Gratitude, 131; origin of, 132; a rational feeling, 133; as a motive, 134.

Habit, Force of, 163; relation to imitation, 252; defined, 254, 268; relation to feeling, 258; sometimes an evil, 262; influence upon the sensibilities, 263; relation to custom, 254.

Habits, Value of good, 255; of feeling and conduct, 256; law in the formation of, 261; sometimes in the way of progress, 262; transmitted, 264; tobacco and opium, 265.

Hamilton, as to attention, 218.

Happiness, No specific desire for, 152; what it is, 153, 277.

Hatred, 146.

Health, Conditions of bodily, 211.

Hearing, Nerves of, 13; knowledge by, 13.

Hope, 159.

Humor, 121.

IDEAS, of space, 28; of duration, 29; intuitive, 30; distinguished from truths, 30; influence of upon representation, 38; abstract, 79, 80.

Imagination, 40, 44; subject to law, 41; differs from fancy, 41; forms and uses, 42.

Imitation, connection with habit and instinct, 247; when it begins, 248; earliest acts, 249; in the home, 250; in later periods, 251; mental and moral, 251; definition, 247, 268.

Indignation, 140.

Induction, 91, 92, 105.

Influence, Reflex, of activities, 171. Ingratitude, 132.

Instinct, Mysterious, 234; in animals, 235; offices of, 236; limita-

tions of, 237; relation to the senses, 238; exercise of, 238; differs from other impulses, 239; various definitions of, 240; in man, 241; distinguished from intuition, 243; stupidity of, 244; defined, 246; relation to imitation and habit, 247.

Instruction, Moral, in schools, 187. Intelligence, necessary to responsibility, 178.

Interest, what it is, 61.

Intuition, 32; moral, 175; differs from instinct, 243.

JEALOUSY, 145.

Judgment, 82; defined, 87; a judgment, 82; moral, 177; guided by law, 189; guided by experience, 269.

Judgments, varieties, 83, 84, 85; immediate and intuitive, 89.

Keller, Helen, Rapid acquisitions of, 25.

Knowing, Summary of activities of, 106.

Knowledge, First, of child, 19; desire for, 154; a baseless distinction as to, 100.

Law, Moral, 189; scope of, 191; inquiries as to, 196-199; defined, 208.
Love, Parental, 128; filial and fraternal, 129; word used for desire, 153.

Malevolent, affections, 140, 141, 148. Malice, 146.

Man, a complex being, 7.

Memory, Early activity of, 19; defined, 45,71; differences in power of, 65, 66; relation to attention,

Methods, of studying man, 2, 4. Mind, 1, 6; what we know of, 7; state of affecting memory, 63. Moral, The, nature, 173; synopsis of | Prepossessions, 142. nature, 185; intuition, 175, 186; perception, 175, 186; judgment, 177, 178, 186; feelings, 180-183; law, 189; scope of law, 191; inquiries as to law, 190-199; law defined, 208.

Motive, Desire the universal, 151; strongest, 168.

Motives, Conflict of, 272; can be selected, 273; predominant, 274; series of, 275-277; highest, 277.

Movements, Automatic, 163; random, instinctive, reflex, 164; voluntary, 165; impulsive, 229; illustration of impulsive, 231, 232; illustration of reflex, 232.

NERVES, 10: office and classes, 11: of the special senses, 12-14.

Nervous, system, 8; influence of condition of, 209.

Notions, General, 74; how formed, 75.

Opium, Effect of habit of using, 265.

Pains, Effect of attention to, 210. Patriotism, 133: instinctive and rational, 134: influence of education upon, 134.

Percept, 20; defined, 26.

Perception, 20; conditions of, 21; activities involved in, 22; defined as an act and as a power, 26; moral, 175.

Perceptions, Acquired, 23.

Perceptive, summary of activities,

Philanthropy, 135; effect of education, 136.

Pity, 136.

Power, Desire of, 157; change with age, 158.

Preference, Feeling of, 166. Prejudice, 141, 142.

Premises, 93, 95.

Principles, Fundamental, of right. 200-202; practical rules of life deduced from, 203.

Productiveness, Conditions of mental, 211, 212.

Progress, sometimes obstructed by habit, 262.

Proof, proving, 98.

Property, Right of private, 157.

Proposition, 87. Psychology, defined, 6.

Punishment, not revenge, 147.

Purpose, Importance of a definite. 212.

READING, Mental process in, 36.

Reasoning, 90; implicit and explicit. 91; demonstrative and probable. 99; by analogy, 103; defined, 105.

Repetition, 59.

Representation, Illustrations of, 37; real and ideal, 39, 40.

Representative, power, 38; defined, 44; summary of powers, 72.

Reproduction, 45, 46; influence of bodily and mental conditions on, 55; passive, 67; limited, 68; fundamental law of, 72.

Resemblances, 48.

Resentment, not retaliation, 139.

Respiration, Automatic, 228.

Responsibility, Feeling of, 168.

Retention, 38, 39; a fact, 45; conditions of, 55, 56.

Revenge, 146.

Reverie, 69.

Right, things so considered, 176; what it is, 187; applied to inanimate things, 188; idea of, 199; fundamental principles of, 200-202; use of term, 205; defined, 208.

Rights, 208.

SATISFACTION, Feelings of, 180.

Self-love, 152.

Selfishness, 152.

Sensation, 17, 26; relation to perception, 21, 34.

Sensations, First, material of knowledge, 20.

Senses, The, knowledge derived by, 12-14; original and acquired power, 23; examples of acquired power, 24.

Sensibilities, 108; defined, 126. Sensorium, 21; defined, 26.

Sight, 13.

Signs, Natural, 53; artificial, 54.

Similarity, Law of, 47.

Sleep, Importance of, 211.

Smell, 12, 13.

Society, Desire of, 154.

Soul, The, 1.

Space, 28.

Stimuli, to attention, 215-217.

Study, Methods of, 1-4; obstacles to, 5.

Sublime, Feeling of the, 124; morally, 184.

Succession, Idea of, 29.

Suggestion, Fundamental law of, 72. Superiority, Desire of, 156.

Syllogism, 93; illustrative diagrams, 95-97; defined, 105.

Sympathy, 137.

TASTE, 13; mental, 123.

Teacher, First work of, 23; second work of, 43.

Tendencies, Inherited, etc., 264.

Terms, of a syllogism, 94.

Terror, 160.

Testimony, 99.

Thinking, 73; of children, 74.

Time, 30; effect of lapse of on retention, 60; value of systematic division of, 211.

Tobacco, The habit of using, 265.

Tribunals, Action of legal, 191.

Truths, how expressed, 31; characteristics of intuitive, 31.

Vopition, 166; desire precedes, 167; two elements necessary to excite, 270.

Will, The, influence in reproduction, 67; nature of illustrated, 165; freedom of, 167; defined, 172.

Willing, Steps in the process of, 166. Wit, 121.

Wrong, some things so considered, 175.

